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A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

PUBLISHED BY
MITCHELL BROS. & CO.

VOL. XXX.

CHICAGO, ILLINOIS, SEPTEMBER 15, 1911.

No. 3.

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SINGLE COPIES, TEN CENTS.

TO EVERY OWNER OF A ROOF

If I could prove to you, absolutely beyond question, that my preservative compound will stop the leaks in any kind of a roof, and prevent it from leaking FROM FIVE TO TEN YEARS, you wouldn't hesitate to use it, would you?

I CAN DO MORE! I can show you where old and leaky roofs were made good, and have remained good considerably more than ten years. Honestly, FIVE YEARS OF WEAR DON'T SHOW on roofs that have been covered with my Indestructible Roof Preserver.

You can take any kind of a roof that is SO FULL OF HOLES THAT IT LEAKS LIKE A SIEVE—big holes and little ones—and repair it with my preserver so that it will be just as good as it ever was.

But, of course, if it is applied to new roofs, they WILL NOT GET LEAKY—which is better yet. This is economy, isn't it?

Remember, too, that no expert is needed to apply it. YOUR GENERAL UTILITY MAN CAN DO IT.

It is a mineral compound—waterproof—sunproof—weatherproof. It is applied like paint. It not only stops all leaks, but it protects iron from rust, and shingles from decay. And it is just as good for felt, gravel and composition roofs.

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gives protection and reduces fire insurance rates,

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tells the temperature of the grain in any part of the bin.
This device soon pays for itself in lessening the labor of
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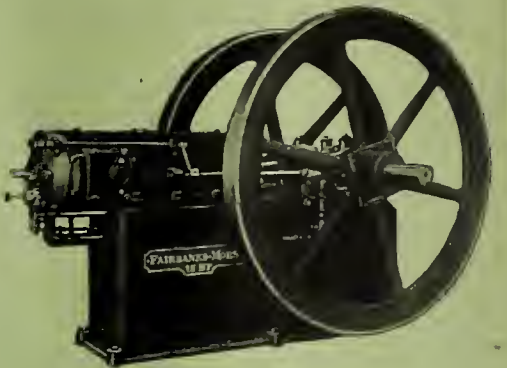
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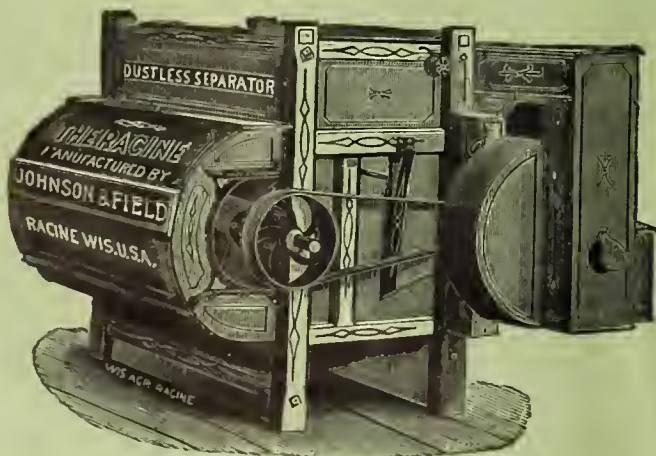
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because it has both a blast and a suction which, working together, produce results that would be impossible with a machine having only blast or only suction.



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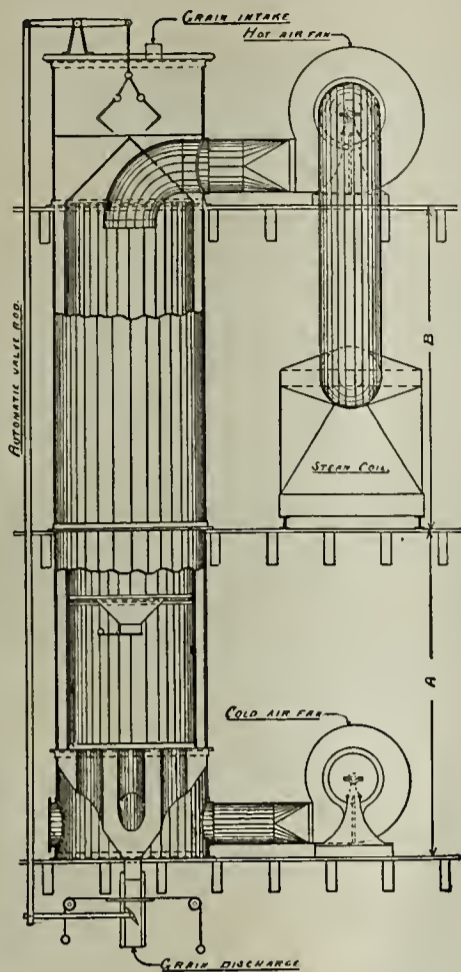
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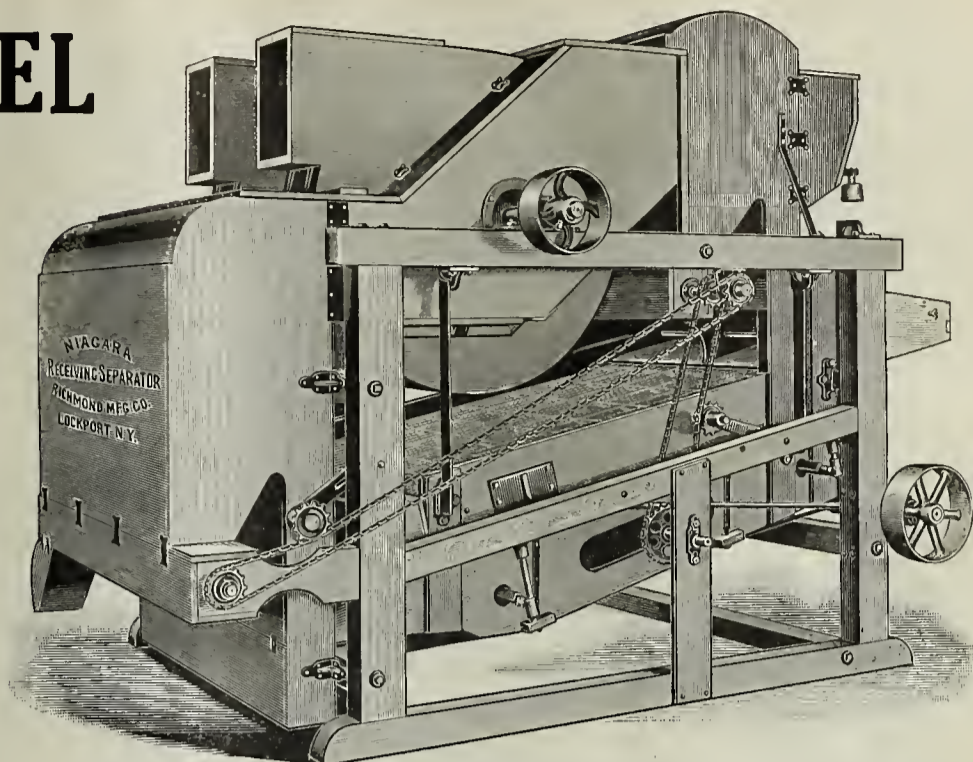
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Will remove from grain any percentage of moisture desired. Hot or cold air or both can be used.

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Especially adapted for cleaning all kinds of grain. Steel sieves. Deep ring oiling boxes. Cleaners that keep the sieves clean at all times.

Built of steel, wood, or wood covered with steel, in capacities from 30 to 4000 bushels per hour.

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BUY INTERNATIONAL SUGAR FEED IT WILL INCREASE YOUR TRADE

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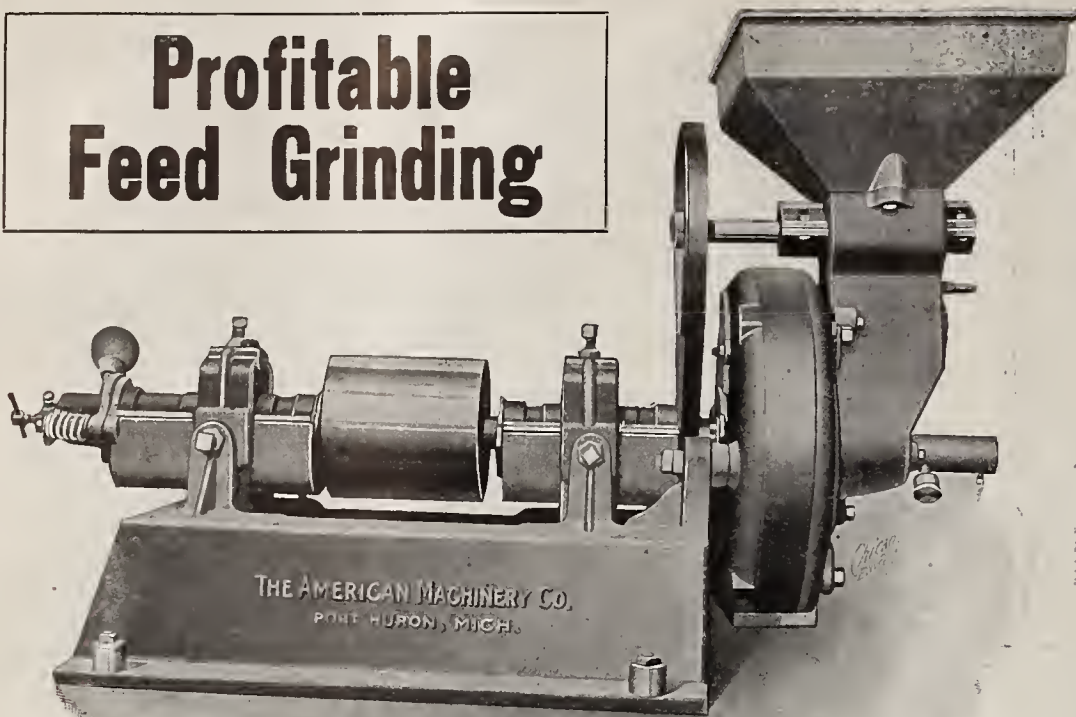
Yours very truly,
J. T. DARNIELLE.

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The "AMERICAN SPECIAL" Feed Chopper

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A Single Drive Machine Which Does Equally As Good Work As Any Double Plate Mill

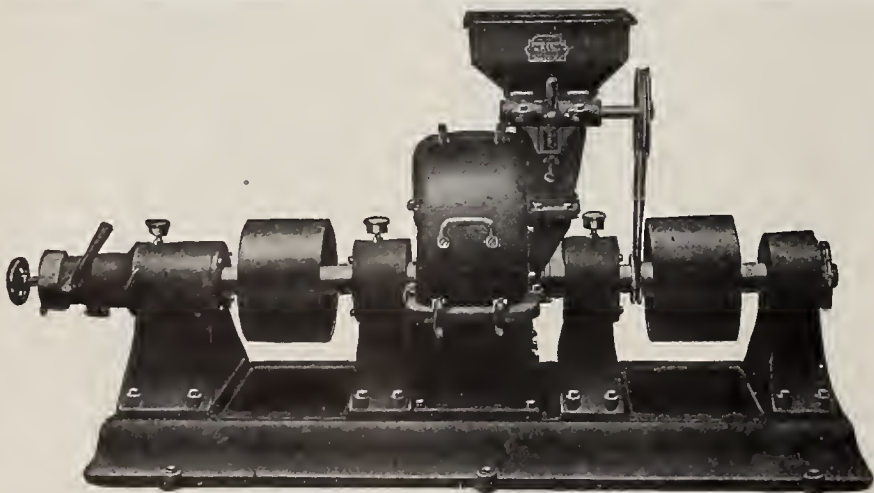
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That's better than describing the machine—telling you how beautifully it is painted—how symmetrical its appearance, etc., etc. Isn't it?

Every machine for a modern grain elevator is made here. Catalogs and special booklets covering the different departments will be sent on request.

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It will reduce the biggest expense item in feed grinding, the power consumption, by at least one-third, or increase capacity on the same power by that much. *We positively guarantee this.*

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Quality and Capacity Can't Be Equaled

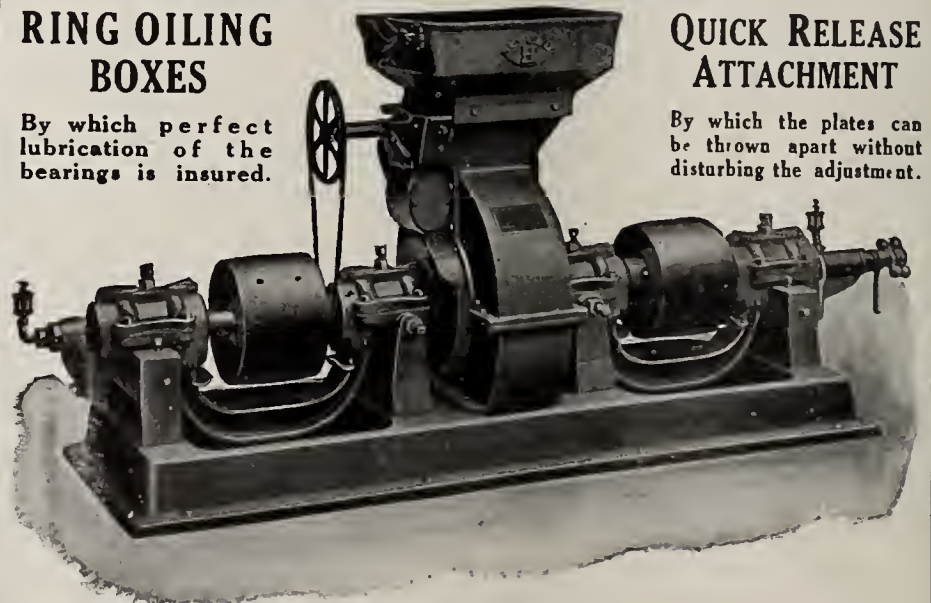
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By which perfect lubrication of the bearings is insured.

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By which the plates can be thrown apart without disturbing the adjustment.



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By which the plates are prevented from striking together when hopper is empty.

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By which the grain is easily conveyed to the grinding plates, making a positive and noiseless feed.

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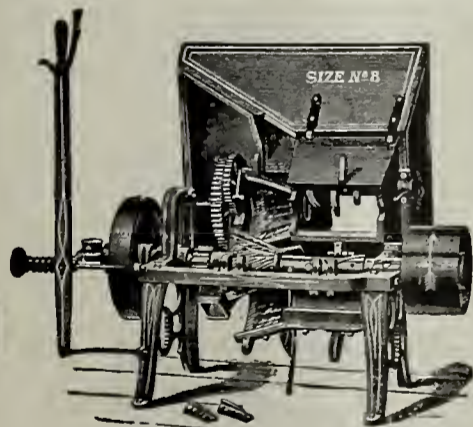
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Drive pulley overhung. Belt to it from any direction. Makes complete independent outfit.

(Sold with or without soaking elevator)

It CRUSHES ear corn (with or without shucks) and GRINDS all kinds small grain and KAFFIR IN THE HEAD. Has CONICAL shaped GRINDERS, DIFFERENT FROM ALL OTHERS. RUNS LIGHT. Can run EMPTY WITHOUT INJURY. Ahead of rolls or stones in speed and quality of work.

YOU NEED a mill now. Quit THINKING about it. COMMENCE to investigate. Give US a chance and we'll tell you WHY we think ours is the best.

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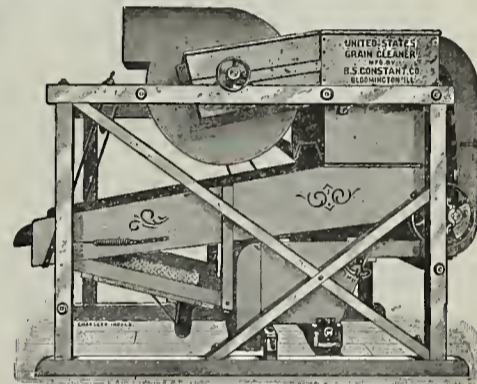
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The U.S. Grain Cleaner

For Corn and Oats

Will clean wheat when a wheat screen is provided.

New Tossing Movement and Device which turns the cobs and shucks over and saves all the corn, also the screenings.

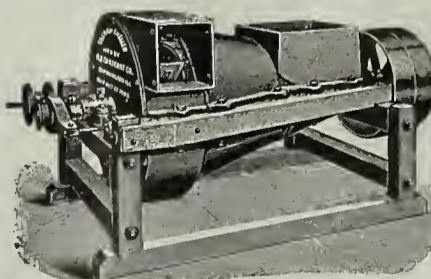


Notice that the cleaned grain leaves the Cleaner under the center, making it very convenient to spout in any direction.

Easily and cheaply installed. Simply spout the corn and cob to the Cleaner and the automatic spreader takes care of it.

No Bracing necessary. Bolt it to the floor and Block against the pull of the Belt.

The U. S. Corn Sheller



Our No. 1 and 2 on a wood frame with separate fan and Lock Wheel Adjustment always gives

Entire Satisfaction.

It saves time and money when installed or repaired.

Write us before buying.

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SEEDS

Grain, Clover and Grass Seeds,
CHAS. E. PRUNTY,
7, 9 and 11 South Main St. SAINT LOUIS

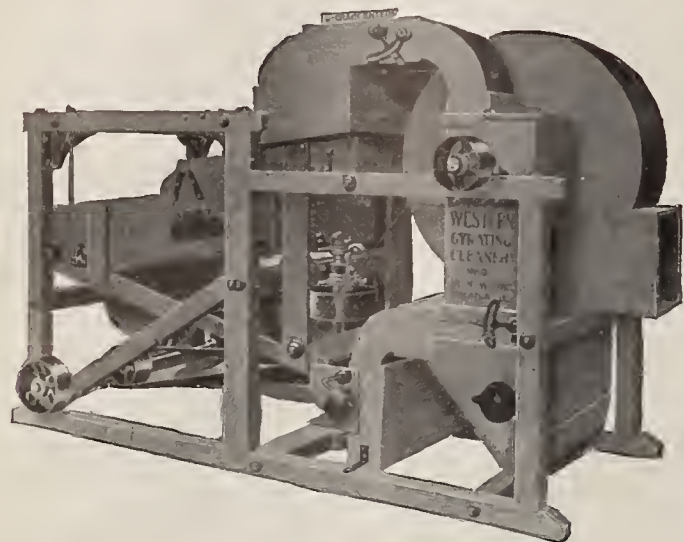
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The Western Gyrating Cleaner

when another Corn Crop will be Harvested, and reports from most sections indicate a good yield.

Are you prepared to handle your share of it?

Is your equipment in first-class condition?

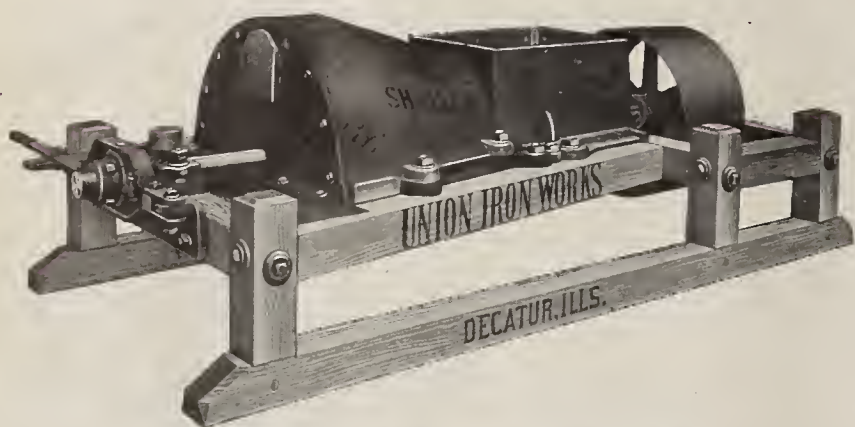
NOW IS THE TIME TO INVESTIGATE.

You never lost any money investigating.

A WESTERN Sheller or Cleaner

often pays for itself the first year in increased profits. How about your buckets, belting, loading spouts, etc. Remember, we are prepared to furnish anything needed from pit to cupola.

Write for Catalog today. It's FREE.

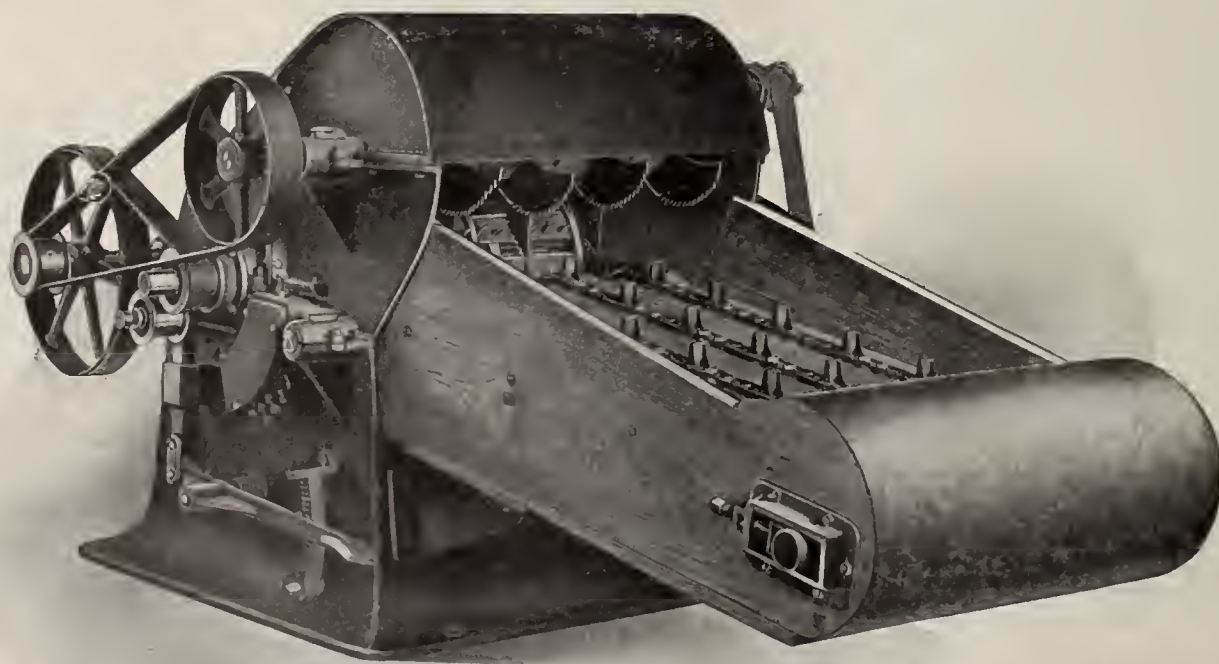


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UNION IRON WORKS
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Wolf Alfalfa Grinding Mill



with ball bearings, automatically fed by drag chain; no choking or overloading. Grinds meal fine or coarse. Only small power required.

We invite attention to our

Wolf Alfalfa Grinding Mill

confident that we have the best mill on the market. It is giving the utmost satisfaction wherever sold, and is shipped with the same guarantee that accompanies all WOLF standard machines.

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Nothing Better for Corn

The Victor Corn Sheller

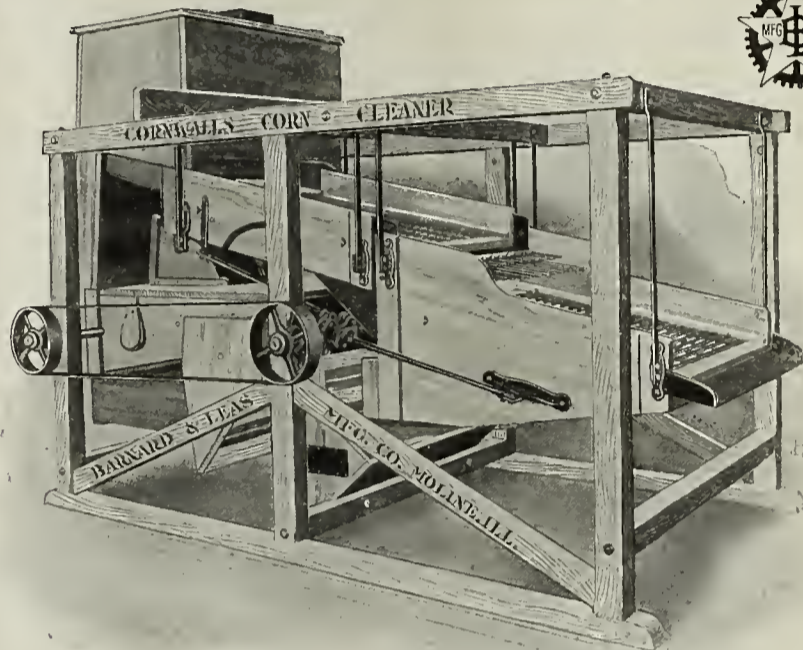
Has large capacity, is efficient and durable.
Is adjustable while running.
Has conveyor feed.

The Cornwall Corn Cleaner

is easily first in capacity, quality of work and durability. It has a double row of steel rods for separating the corn from the cobs and husks. Is equipped with our patent finger sieve which cannot clog. Has divided shaker, two air separations and the latest style feeder.

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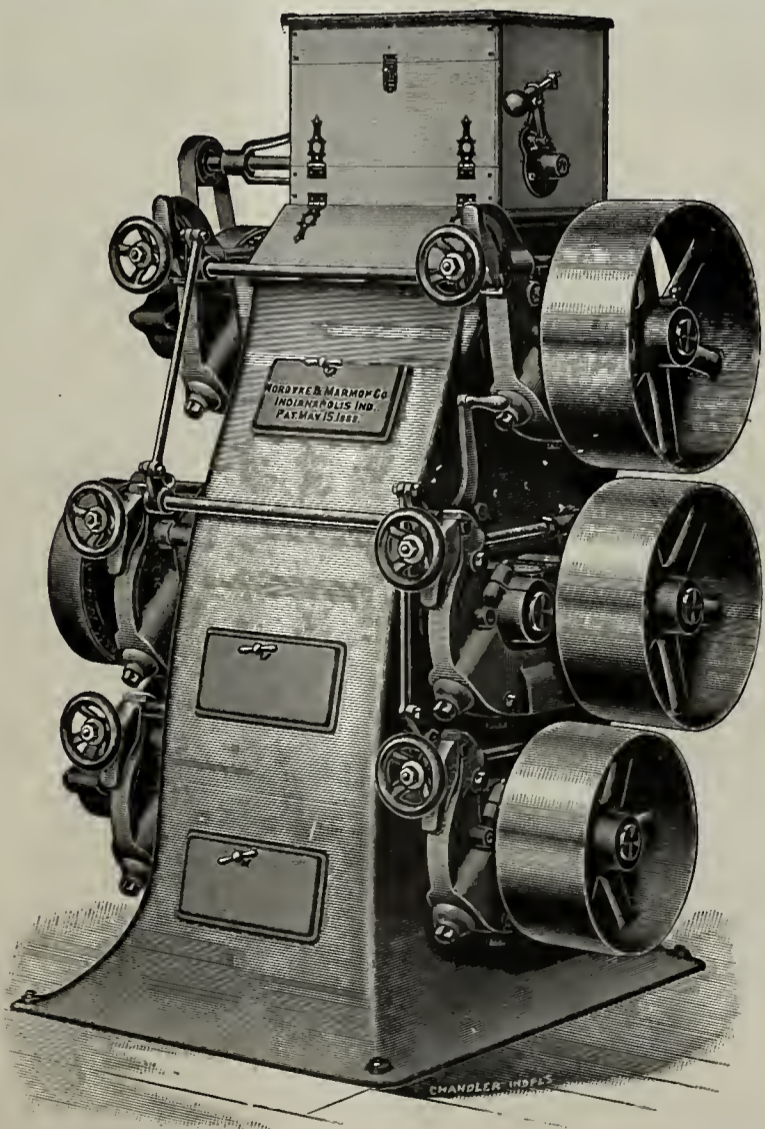
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Mill Builders and Mill Furnishers

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THREE-PAIR-HIGH SIX-ROLLER MILL

The most substantial, most economical in cost of maintenance. Has great capacity and requires comparatively small power. The only Six-Roller Mill with drive belts properly arranged to place the belt strain on bottom of bearings, where it belongs. It is not the cheapest mill in first cost, but it is by long odds the cheapest in the long run. It is without question the best roller feed mill on the market. Feed grinding pays best when you have a mill which will do perfectly any kind of grinding required and stand up under hard work without breakages and delays.

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We carry a complete stock of Heads and Boots, Elevator Buckets and other Elevator Supplies. All orders are given the very best of attention.

Nordyke & Marmon Company

America's Leading Flour Mill Builders

Established 1851

INDIANAPOLIS, IND.

NOT A BILL OF EXPENSE BUT A SOURCE OF REVENUE

Enables
Shippers
to
Collect
Claims
—
Requires
No
Repairs
—
Occupies
Small
Space
—
Most
Economical
to
Install



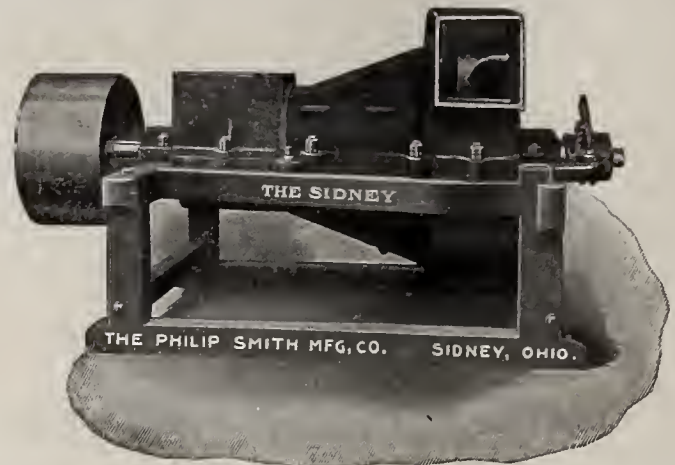
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Never
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Will Not
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Wear Out
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60 Days'
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PORTABLE BAGGER

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National Automatic Scale Co.
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THE SIDNEY FAN DISCHARGE CORN SHELLER



Patented December 1, 1908.

WE have many points of advantage over other shellers discharging in same manner. In case of breakage each casting is separate and less expensive to repair. All parts are made heavy, making it more durable. Compare our weights with other shellers. Using the very best iron, shelling surface chilled, insuring durability. Fan discharge separate from cylinder on shaft. Either style knockers, right or left hand, discharging over or underneath, to suit location; no expensive hopping; can be set on a level with boot, avoiding a pit or tank. Drive pulley on either end; unless otherwise specified we place same on hopper end. Guaranteed to give satisfaction and do the work required. Will not crack the grain. Provided with adjustable attachment, so that the cylinder can be adjusted to the condition of the corn while the sheller is in motion.

Furnished with either screw feed knockers or conveyor feed, side feed hopper, right or left. Unless otherwise ordered we ship knocker feed with straight hopper.

We manufacture Shellers, Cleaners, Drags, Dumps, Manlifts, Etc. You will find some of our machines in your vicinity, no matter where you are. Write us for complete catalog and prices.

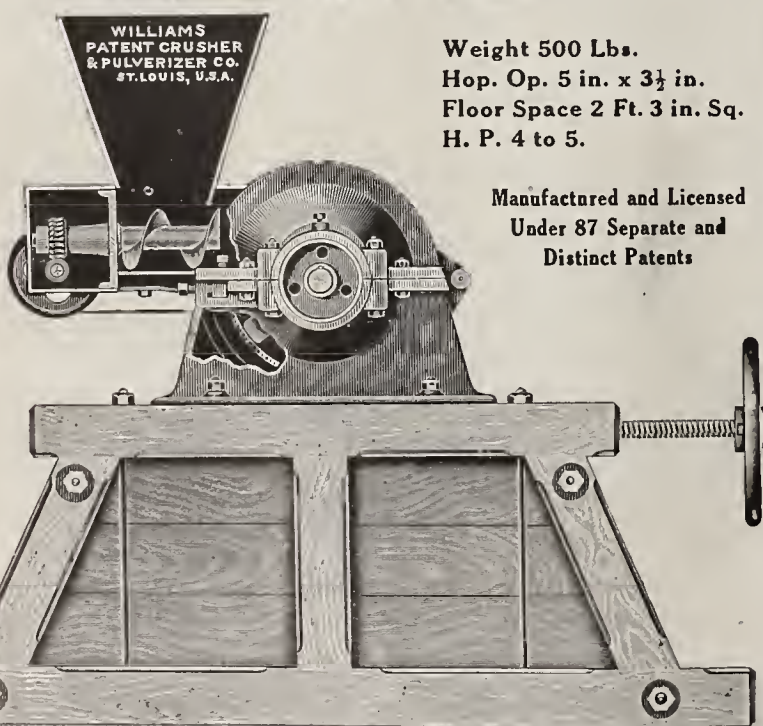
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Williams' Infant Grinder

WILL GRIND

Bones . . .	1000 Lbs. Per Hour	Screenings . . .	500 Lbs. Per Hour
Oats . . .	300 " " "	Shelled Corn . . .	800 " " "
Wheat . . .	600 " " "	Alfalfa . . .	400 " " "
Coffee . . .	1500 " " "	Beef Scrap . . .	400 " " "
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Weight 500 Lbs.
Hop. Op. 5 in. x 3½ in.
Floor Space 2 Ft. 3 in. Sq.
H. P. 4 to 5.

Manufactured and Licensed
Under 87 Separate and
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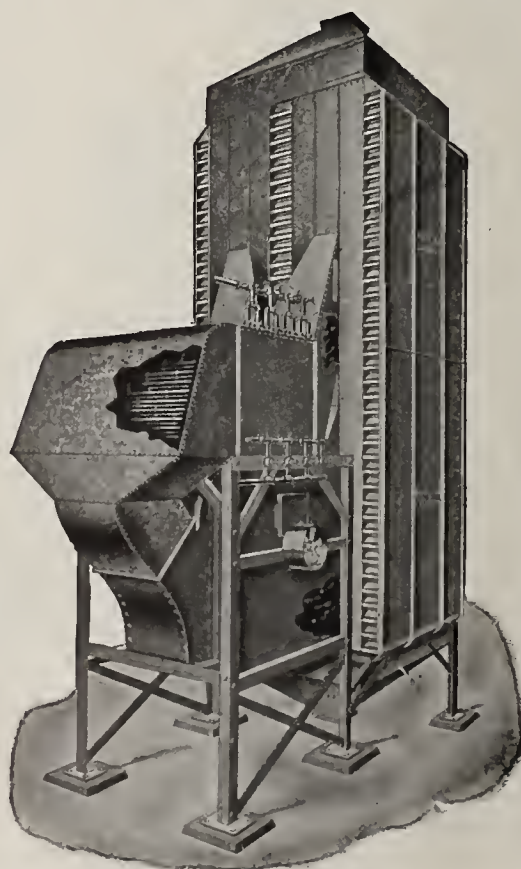
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Works: ST. LOUIS—2705 N. Broadway
428 Monadnock Bldg., SAN FRANCISCO. Old Colony Bldg., CHICAGO

HESS=DRIED

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Best Dried



HESS GRAIN DRIERS are used everywhere, by Grain Handlers, large and small.

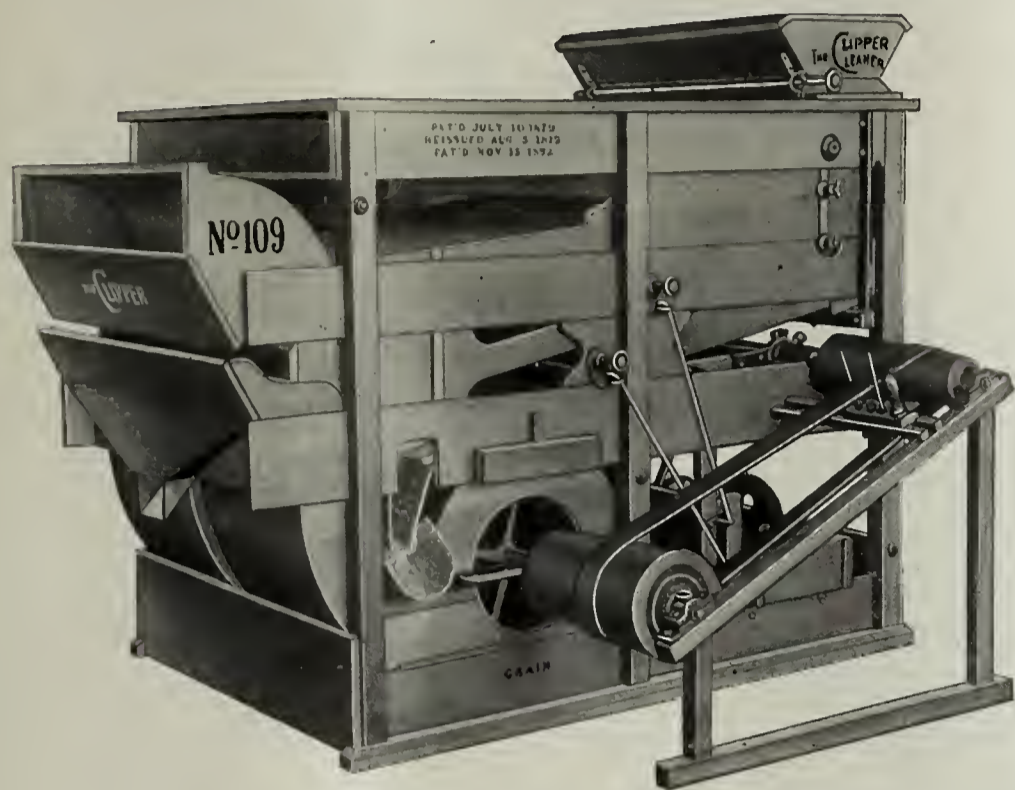
We make small sizes for country elevators and large ones for terminal elevators; eight regular sizes in all.

No. 3 Ideal HESS Drier and Cooler.
The Car-load a Day size.

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Hess Warming and Ventilating Co.
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Combination Seed and Grain Cleaners



Our line of Clipper Seed and Grain Cleaners will give equally good satisfaction in cleaning clover, timothy, alsike, alfalfa, flax, millet, cane, kaffir corn, wheat, oats or any other kind of seed or grain.

The Clipper has two strong combination features: Traveling Brushes on the screens and Special Air Controller. The first keeps the screen perforations and meshes clear all the time and the second regulates the Vertical Blast to exactly meet the requirements of the stock you are cleaning.

We have an endless variety of perforated zinc screens, also of the best grade of woven wire screens in square and oblong meshes.

All of our machines are well made with close fitting joints. They can be changed from grain to seed by simply changing the screens and regulating the vertical blast.

Easily installed and simple to operate, they always give satisfaction.

Write for catalog and prices.

A. T. FERRELL & CO., SAGINAW, W. S., MICH.



"Eureka" Dryers



**IN EVERY CASE EXCEED
THE CAPACITY GUARANTEED**

Consequently a user can handle corn containing any amount of moisture, without reducing the capacity.

READ WHAT A USER SAYS, AFTER ONE SEASON'S WORK:

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Gentlemen:—We used the Corn Dryer on about thirty cars last Fall and found that you had more than exceeded your guarantee. We have no figures to give you as we had no Moisture Tester, but we dried 160 bushels of Green Corn per hour, with 30 pounds of steam, and put it in condition for carrying four weeks to New England.

Our broker said we had the best corn that had arrived in that section. We would not be without the Dryer at any cost.

Very truly,
C. N. ADLARD.

"Eureka" Dryers are guaranteed to give Perfect Satisfaction
Investigate Them

THE S. HOWES COMPANY

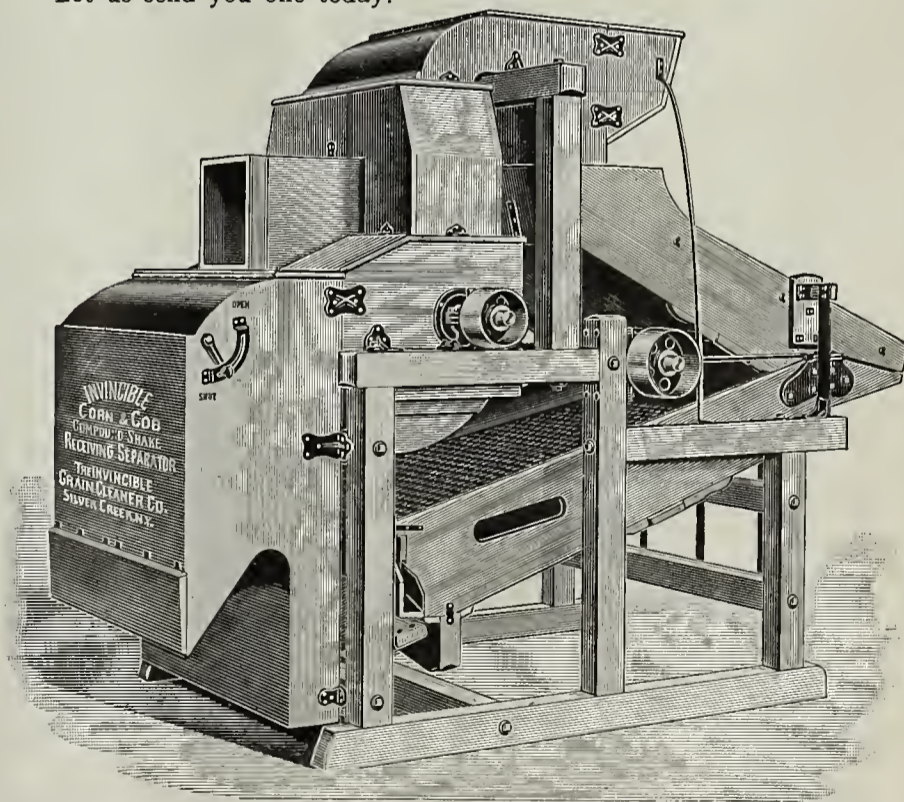
"Eureka Works," Silver Creek, N. Y.

ESTABLISHED 1856



More of the INVINCIBLE Corn and Cob Separators

are being sold and used today than all others combined—
There is but one reason for it—they do the work better than others.
Let us send you one today.



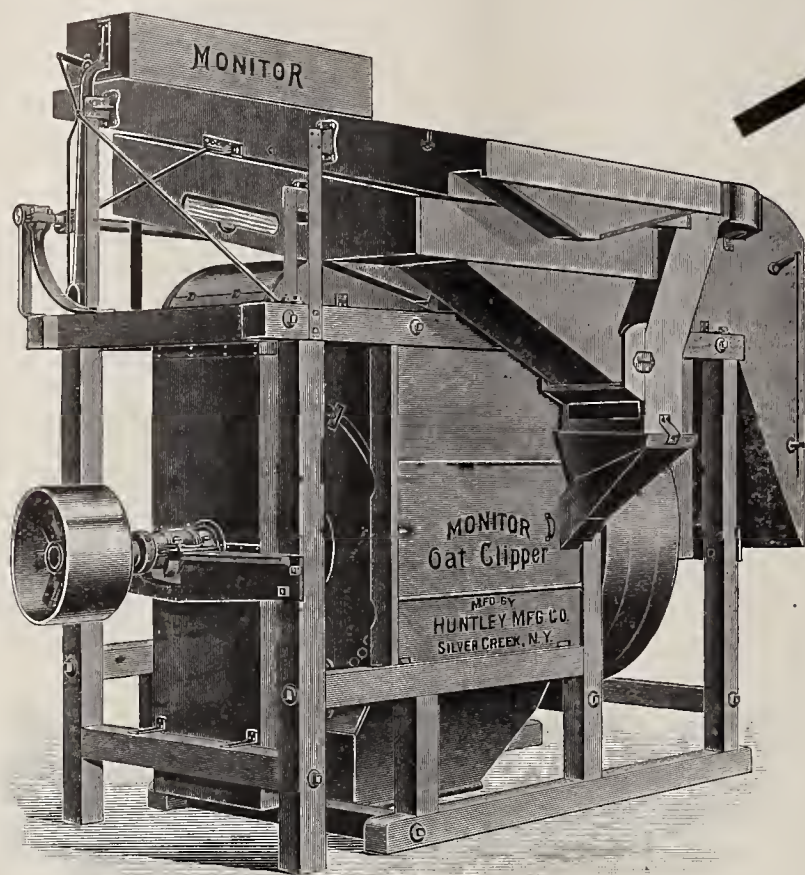
INVINCIBLE GRAIN CLEANER COMPANY

SILVER CREEK, N. Y., U. S. A.

REPRESENTED BY

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The Strong-Scott Mfg. Co., Minneapolis, Minn.
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**PRACTICALLY
INDESTRUCTIBLE**

FIRE PROOF OAT CLIPPERS

**BUILT
FOR
HARD
SERVICE**

This is the machine we have supplied to many of the most up-to-date elevators built during the past ten years. All the desirable features of our famous "Monitor" Oat Clippers, of our standard construction, are embodied in this machine. We simply took our standard machine and made it fireproof—hence we are able to guarantee the same wonderfully perfect work for this machine as with our regular oat clippers.

For simplified, economical work, there is nothing that approaches a "Monitor." Its adjustment provides for quick regulation, accurately controlled clipping on any range of work—from light to heavy. Investigation will prove to you that more "Monitors" are installed in our best equipped elevators than any other make—our catalog will explain why—send for a copy,

**THEY
REQUIRE
NO
MORE
POWER**

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Owego, N. Y.: J. H. Foote.

The American Elevator and Grain Trade

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No. 3.

ADDITION TO KANSAS CITY ELEVATOR.

On July 1 of the present year there were completed fourteen concrete storage tanks as an addition to the Coburg Elevator, at Kansas City, Mo., owned by the Chicago, Milwaukee & St. Paul Railroad Company, these tanks having been erected for that Company by James Stewart & Co., of Chicago. The Coburg Elevator now comprises thirty-one tanks, with storage of 1,200,000 bushels, which, with a working house of half a million bushels' capacity, give the Railroad Company total storage room for 1,700,000 bushels.

This large line of tanks has been a matter of gradual growth. There were at first but eighteen tile tanks, built in 1904 by the Barnett & Record Co. Then five concrete tanks were added in 1908, built by James Stewart & Co. To these, four more concrete tanks were built in 1909 by the Railroad

Company's own engineers; and the present year witnessed the completion of the fourteen tanks shown in the accompanying illustration.

Each of the new tanks is 25 feet in diameter and 85 feet in height, giving a capacity of 25,000 bushels. This given 350,000 bushels' storage in the fourteen tanks. Grain is conveyed to and from the tanks by an overhead and an underneath conveyor belt system, this belt system being merely a continuation of the belt used by the other tanks, the two systems being spliced at the meeting point of the old and the new clusters of tanks. An illustration is also given here of a section of the belt conveyor as seen in the cupola, which also is of concrete, and is one of the distinctive features of the James Stewart & Co. style of tank construction. They have found the concrete cupola to be so satisfactory that they are now building them of concrete in preference to other materials. Each

of the conveyor belts has a carrying capacity of 15,000 bushels an hour.

With the completion of these new tanks, the Chicago, Milwaukee & St. Paul Railroad Company will have at the Coburg yards ample storage capacity for all immediately prospective demands for space, and Kansas City's facilities also are increased by just so much by this new addition.

SOUTH AFRICAN CORN.

The acting Minister of Agriculture of the Union Government of South Africa has approved regulations for the inspection and grading of corn (maize), Kaffir corn and jiba, in effect on July 1, 1911. These regulations provide that no grade certificate will be issued in respect of any consignment of grain found on examination to be wet, unripe, weevily, or musty; nor will a certificate be issued



CONCRETE GRAIN TANKS, FOURTEEN IN NUMBER, ADDED TO THE COBURG ELEVATOR PLANT, KANSAS CITY, MO.
Erected for the C., M. & St. P. R. R. Co. by James Stewart & Co., Chicago.

in respect of artificially dried maize. Wet grain which has been dried to the satisfaction of the grader will be permitted to be exported under government supervision, but will be accompanied by a special form of certificate which will be marked "wet maize dried to the satisfaction of the grader." Weevily grain will be accepted by the Railway Administration for transport to the coast, and will be permitted to be exported under government supervision, but will be accompanied by a special form of certificate which will be endorsed "weevily." Grain found to be unripe or musty will not on any account be permitted to be exported under government supervision, and no certificate of any kind will be issued in respect of any such grain.

The inspector is required to pass on each and every bag of any consignment; and certificates of inspection must be identical with that of the bill of lading.

[For the "American Elevator and Grain Trade."]

SOME FACTS ABOUT BARLEY.

III.

BY JULIAN KUNE.

The noteworthy fact connected with barley culture in the United States, namely, the phenomenal increase of acreage and yield in the years 1900 and 1901, has never been referred to by any agricultural writer or statistician.

From 1874, during which year the writer first identified himself with the barley trade, up to 1900, the acreage and production showed from year to year a moderately progressive increase. The area under barley never exceeded three million acres, nor did the production go beyond sixty million bushels. In 1901 the commercial world, and especially those interested in the barley trade, were surprised by the Government's estimating the acreage at 4,295,744 and the yield at 109,932,924 bushels, showing an increase of 2,031,462 in acreage and 51,007,091 bushels in yield during the short interval of a few months. This phenomenal change in conditions of barley culture wrought a marked effect on both the cultivator of and the trader in barley. The first, alarmed at such an enormous quantity of barley being raised and thrown on the market, reduced his acreage, while the latter, as it was natural for him to do, in the face of such enormous quantities of barley, reduced his bids. It seems, however, that more recently the barley trade has awakened to the true situation of the barley crop, its acreage and yield through the conviction that for years the estimates were altogether too high, and that the annual computation was made from the wrong original basis, given to the country during 1901.

NEW ERA IN THE BARLEY TRADE.

Without passing judgment on the correctness of the estimates given by statisticians, one factor must be noted in connection with the barley trade and its culture, and that is, the almost universal recognition of barley as a feed grain in competition with oats, which fact more than counteracted the effects of an overestimated crop production. When farmers began to learn that barley makes as good, and in some cases even a better, feed than oats, the barley trade entered upon a new era. Farmers found that the barley they raised was fit for use for other purposes besides the making of malt for beers. They further found from actual experience that the feeding of barley, especially if crushed, fattens hogs and cattle as well as does corn. Although barley was known as a feed for cattle and horses away back during Biblical times and is at this day almost generally used as feed in most European countries, its adoption in this country was for some reason or other very slow; but within the last few years it has made rapid progress, and now that the prejudice against barley as a feed is gradually being removed, farmers will most likely redouble their acreage under barley and thus add one more cereal to their list of diversified crops.

BARLEY IN COMPETITION WITH OATS.

Since the adoption of barley as a feed grain in this country, it began to exert an influence upon the price of oats. Formerly some of our more enterprising maltsters were in the habit of selling oats for future delivery whenever they sold malt at the

beginning of the malting season, to be delivered during succeeding months. Gradually elevator men who never before dealt in barley began to buy barley and barley screenings for the purpose of mixing with their oats; and finding it profitable, they continued this practice for several years, or until the wanton greediness of some mixers almost "killed the goose that laid the golden eggs." They overdid the thing; instead of using 10 to 15 per cent of barley in their mixtures, they used 30 to 50 per cent, thus committing a fraud upon the purchaser. Finally, some very stringent rules were passed by boards of trade in most of the Eastern cities to which the mixed oats were shipped, and all barley-mixed oats were required to be so designated and had to be sold as such.

PREJUDICE AGAINST BLEACHED BARLEY.

The prejudice thus engendered through the dishonest dealings of some mixers, and the untoward conditions of the oats crop of 1910, put a temporary stop to the competing race between barley and oats; the latter during that year was so plentiful and of

any other cereal which farmers are now profitably raising, it can nevertheless be increased from 25 to 35 per cent without affecting the price which it now commands. I do not refer to the present extraordinary prices, caused by the failure of the crop, but to ordinary normal prices.

THE DETERIORATION OF OUR BARLEY.

To those who have been accustomed to handling the choice Nebraska barley of thirty years ago and that of Iowa and Wisconsin of twenty years ago, and the Minnesota barley of about ten to fifteen years ago, to say nothing of the choice Canadian of twenty-five years ago, it is apparent beyond contradiction that the quality of our barley has deteriorated to an alarming extent; but we must not lay the blame for this decadence in quality to the farmers alone, but to the changed tastes of the people who drink beer. Some thirty years ago, the beer drinkers preferred the dark-colored lager, which was made of the choicest bright malt and hops. When later the people's taste shifted to the light-colored beers, only the choicest bright colored barley could be used for



GRAIN CONVEYOR BELT IN COBURG ELEVATOR, KANSAS CITY, MO.

such an excellent quality that mixing them with barley was not profitable, and the barley crop during that same year, having been greatly overestimated, while its quality was much inferior to normal, was not profitable to be used for mixing purposes, as both quality and color were below those of oats.

BARLEY A MORE PROFITABLE CROP THAN OATS.

There was an increase in the acreage of barley during 1911, which shows that notwithstanding the discouraging conditions during the last two years farmers are convinced that the cultivation of barley is fully as profitable as that of oats. Some statisticians go even further and claim that it is more profitable to raise barley than oats; and their figuring is as follows: The states of Iowa, Wisconsin, Minnesota, South Dakota and North Dakota had an acreage of 3,815,265 and a yield of 108,401,220 bushels, netting to the farmer 36 cents a bushel. Now suppose the above states had sown to barley 11,351,439 acres, the same as they put under oats, they would have realized \$7,265,743 more than they did from their oats crop from an equally sown acreage. This result is limited to the five barley raising states of the country; but there is not the least doubt that if the same reasoning should be applied to the whole country, the result would be about the same.

While it would be idle to recommend an increase in the cultivation of barley at the expense of oats or

making them. At about that time the discovery was made that the admixture of white corn grits in small quantities to the malt would impart to the beer the desired bright color and at the same time reduce very much the cost of the beverage, if made exclusively of pure, bright colored malt. Here again, greediness overruled good judgment; and in order to produce light-colored beer as cheaply as possible, brewers began to use more and more of the corn product than of malt, thereby greatly reducing its quality and its healthfulness. The direct result of these conditions was that the demand for the choicest grades of barley became almost entirely neglected. As the brewers could produce the light-colored beers without the use of malt made of choice bright barley, they, with but few exceptions, used malt made of a darker-colored barley. It did not take very long before choice, bright barley became a rarity, which it is even at present. There was a time when choice, bright-colored barley commanded a premium of ten to fifteen cents a bushel over barley of equal quality but of darker color, but now not more than a couple of cents premium can be obtained for the best and brightest barley, than for the stained grades of the same soundness.

BARLEY BLEACHING.

The bleaching of barley, so as to make its color as white as the choicest naturally bright barley, dates back to about thirty years ago, when the difference in price between the bright and dark colored

grades was between ten and fifteen cents a bushel, which enabled the bleachers to reap great profits; but as the difference in value between bright and dark colored barley narrowed down to very small proportions, bleaching became less frequent, until during in recent years it was practiced again for the purpose of mixing the bleached barley with white oats.

It is needless for me to state here that bleaching of barley or oats is reprehensible, as it commits a fraud upon the unsuspecting consumer by selling him something which is not as represented. As to the bleaching of barley for beer purposes, it has been held that it is not more reprehensible than the bleaching of malt, as both practices are indulged in to deceive. Brewers, however, who make their own malt never bleach either the barley or the malt out of which they brew the beer, which tends to show that bleaching either barley or malt does neither add nor detract from the inherent qualities possessed by them, but is simply done for the purpose of deception.

HOW TO IMPROVE OUR BARLEY.

Without questioning the efficiency of our national Department of Agriculture, I can readily see how it could improve the quality of our barley. In the first place, the national Government should import the very best barley that can be found in European countries, like Bavaria, Hungary and other parts of northern Germany, and distribute the seed among the farmers of the five barley growing states, with instructions how to prepare the soil, to sow the seed and how to harvest the crop and to take care of it after it has been harvested; and after seeing the result in these five states, the Department could then extend the same methods to other states in the Far West suitable for barley culture. California, Utah, Oregon, Idaho and Wyoming should have seed from countries where barley thrives best under irrigation. When after a few years the new imported barley shall have fairly acclimated itself, then the interchanging of seed barley should be kept up between the barley growing states of the country, each one receiving the kind it has been in the habit of cultivating. This practice, if judiciously carried out, and this system is prevalent in European states where the best barley is grown, will result in this country again producing a barley that will equal the best Canadian or Sala barley that was ever grown.

THE PEAVEY SETTLEMENT.

The creditors' committee on August 16 published a statement of the financial condition of F. H. Peavey & Co. at the close of business on July 15, as follows:

ASSETS.	
Shares of subsidiary corporations.....	\$4,789,649.46
Shares of other corporations.....	169,545.04
Notes and accounts of sub. companies..	613,787.20
Notes receivable, sundry.....	21,800.00
Accounts receivable	68,370.20
Chamber of Commerce memberships...	8,000.00
Prepaid interest	776.73
Cash in bank and on hand.....	46,139.92
Total	\$5,718,068.55
LIABILITIES.	
Capital stock	\$3,650,000.00
Undivided profits	30,895.64
	\$3,680,895.64
Notes payable	1,201,200.78
Balance due to subsidiary companies..	827,828.69
Accounts payable	7,515.05
Reserve for taxes and expenses.....	6,628.39
Total	\$5,718,068.55

To this statement is appended an explanatory letter by the creditors' committee, which among other things says:

Claims against F. H. Peavey & Co. aggregating \$1,663,849.20 have been thus far deposited with the Minneapolis Trust Co., pursuant to our recommendation. There remain \$359,180.18 of such claims now outstanding, all of which must be so deposited before the plan which we have recommended can be made effective.

To correct an erroneous impression in some quarters, caused by the publication of inaccurate reports, we take this occasion to advise you that none of the debts of the Peavey Grain Co. of Chicago will

be included in or secured by the proposed collateral deed of trust.

The claims reported outstanding were subsequently filed to the extent, at least of 90 per cent thereof; and on August 30 the refunding plan of the committee was approved; that is to say in lieu of these claims, 3-year collateral trust notes bearing 6 per cent will be issued by F. H. Peavey & Co.

PRESIDENT CARHART.

In the "public eye,"—that great "spot light" to which the daily press pays so much deference and into which it aims to force all things it touches, sometimes the good, more particularly the bad, and always that which is noisily and cheaply vulgar,—the New York Produce Exchange has been in recent years more or less obscured by the glare of its more notorious neighbor, the "Stock Exchange," with its tawdry trappings and its crowd of *nouveaux riches*. The Produce Exchange has lost some prestige, too, by reason of the decline of New York's relative (but, not by any means its absolute) importance as an out-port for grain and grain products in recent years. Nevertheless, the Produce Exchange is still one of the greatest grain, provision and produce



E. R. CARHART.

markets of the world—a market place in which the volume of grain and grain products, provisions, hay and straw and innumerable kinds of "stores" daily sold for local consumption and for distribution over the world is enormous, and without whose facilities for carrying on trade and furthering commerce, many great industries of the Nation would find their natural outlets clogged and their trade disorganized.

The New York Produce Exchange for years was more or less handicapped in its usefulness as a trading mart by what the more iconoclastic West is sometimes pleased to call its traditionalism, which is something like a great merchant's reverence for the methods that brought to him the successes of his youth; but the Produce Exchange has now gone beyond mere tradition, and during the past few years has entirely remodelled its methods of trade to meet the needs of the market itself, as its vast domestic trade increases and the conditions of the foreign trade change, and to harmonize its own practice with the newer practice of traders in the vast country behind New York, which must needs look to that great port as a market for the products of Western farms in one form or another.

In this work of remodeling, no member of the Exchange has been more active or resourceful than E. R. Carhart, president of the Exchange. A member of the old provision firm of E. H. Dougherty & Co., founded in 1836, into whose service he entered as a boy in 1879, Mr. Carhart has been conspicuously identified with all movements of the general trade interests represented in the Produce Exchange for many years. In 1906, while serving as

chairman of the committee of the Produce Exchange, in order to care for the interests of the provision trade of New York in connection with the inauguration of the new meat inspection law that had just been enacted by Congress, he was appointed a special agent of the Department of Agriculture to assist in working out that problem, and served with distinguished ability and usefulness.

It was during this same period that he was devoting much time and thought to rehabilitating the Exchange itself, by working out, first of all, a change in its managerial policy, particularly as to its membership relations; and he is now referred to as the father of the "Associate Membership" plan by which the Exchange solved its gratuity problem, once a compulsory insurance adjunct to membership and a serious stumbling block in the way of accessions of "new and young blood" to the membership body. By the adoption of Mr. Carhart's plan, membership may now be acquired in the Exchange without enforced participation in and contribution to the "gratuity fund"; and the result has been most fortunate. The accession of desirable members has been most satisfactory, and with them have come new trading rules and new facilities for stimulating trade and promoting commerce that put the Exchange in the front rank of the progressive exchanges of the world.

Having contributed so much to this happy estate of the Exchange by his work on its various committees, Mr. Carhart in 1908 was elected vice-president of the Exchange and after serving in that capacity for two years was in 1910 advanced to the presidency and re-elected in 1911. In all cases he has been elected to office unanimously.

[For the "American Elevator and Grain Trade,"]

WHAT EFFECT WILL THE PANAMA CANAL HAVE ON THE WHEAT AND FLOUR TRADES?

BY L. C. BREED.

In the event of the ratification of the reciprocity agreement by the Dominion of Canada, some important changes in the grain trade of the country are bound to be developed; but they will be small compared with what will be witnessed when the Panama Canal shall be opened to shipping.

A few years ago, a short crop of soft wheat was experienced in the red winter wheat territory of the Middle West, and speculators who were short on the market and consequently suffering a steadily increasing loss, turned their attention to the Pacific Coast varieties, with the result that large quantities of that grain were shipped to St. Louis, Chicago and other centers. Even under normal conditions, however, considerable of the soft Coast wheat is shipped to Minneapolis, Buffalo and other Eastern points, where large cereal milling companies are located.

As the cost of transportation must be reckoned with, and as it constitutes a considerable proportion of the price in case of grain, under ordinary conditions this cost confines the marketing of wheat, for example, to such areas of distance from the fields where it is raised as can be reached at reasonable cost and at a figure that is on a parity with the price of wheat from competitive territory.

It is a well-known fact that the quantity of freight which can be loaded in a vessel is enormous. This is witnessed daily at the lake points, so far as grain is concerned; consequently when one considers that a vessel can be loaded at Portland, Ore., for instance, with two to three train-loads of wheat, and within a comparatively short time lay that cargo down at Baltimore, Philadelphia and New York, which are flour-producing points, it is likely to have some effect on prices, especially as the Pacific Coast has always a surplus of wheat for export to Europe and is increasing this surplus.

Except in years of short crops, however, the Coast shippers might find more attractive markets in Europe, and would be able, through the use of the Canal, to reach those markets more cheaply than at present. It would appear that one result of the opening of the Canal to navigation will be to largely increase wheat raising on the Pacific slope, and also largely stimulate the development of the ship-

ping interests of the country, and that, too, somewhat at the expense of the railways.

As the opening of the Canal is comparatively near at hand, and even already our enthusiastic countrymen at San Francisco are preparing to celebrate it on a scale in keeping with the great event, it may be well for those whom it may concern to consider how they may be able to utilize the opportunity which will then be afforded, to raise and to market wheat, or to convert the wheat into flour and dispose of it either in the markets of the Gulf and the Atlantic Coast, or in Europe, as conditions might offer the best inducement.

(For the "American Elevator and Grain Trade.")
THE GRAIN TRADE OF THE PAST.

VII.

BY DANIEL M'ALLISTER.

One of the chief dangers that warehouse men have to guard against, in rural districts especially, is that of the "cracksman," the safe blower, and the thief. There is always some danger from this source; but in secluded places, where money is liable to be found, there is more. Those creatures are always prowling in secret places; and they come into the "open" only when well organized or in dire need. Let me relate a case or two; for I have come in contact with them more than once, hard and close.

In 1872, I think it was, there seemed to have been a syndicate formed and capitalized for the purpose of exploiting robberies and the getting of money and other valuables unlawfully and in any way that fertile and vicious minds might be able to conceive of. I well remember now the trail of evidence the workers left behind them on their way towards the East from the Mississippi River. At that time they "worked" the banks, the offices, hotels and jewelry stores along the way successfully. The day before the one on which they reached Columbus, there was a tray of gold watches, valued at \$2,000, taken by means of the "red pepper act" in Dayton, and other similar goods in similar and in other ways along the route. The first impeding "snag" they ran against, it seems, was here in Columbus. It hindered them for just about five years, or, maybe, nearly six. Let me tell you how it was.

It happened in the springtime. I had stayed at home that morning fixing up the yard, leaving the office and store rooms in charge of my nephew, a boy of fifteen years. These rooms were near the market house, with the city prison, at the time, just half a block away in the rear, and a school house near at hand.

On my way to the office, at about 11 o'clock, I was stopped by a business acquaintance on the corner something like two hundred feet away. Answering his questions, I had the store's front fully in my view. I saw a man in front of it, seemingly looking at the wagon scales.

Another man, just a moment later, stepped upon the platform and entered quickly through the rear side door. The third man entered the hay room, through the west door, in the front. My nephew, who had been sitting at the doorway on a box, got up and followed this third man in, to talk about the hay, the one who had entered at the side door meanwhile working on the safe.

Seeing the two well dressed gentlemen enter in this unusual way, I concluded the boy must have had an unfinished deal on his hands, or that the two were "car-load" customers, and would require the presence of "a man." So I started quickly, at a long angle, to cross over the street. As I approached the office door, the man in front turned suddenly and went away. The one who had entered from the rear came quickly out in front, my nephew following him, gesticulating earnestly. Seeing my approach, he called to me: "Uncle Dan, that fellow there has been trying to go through your safe."

The young fellow was skipping around the end of the market house at the time, but it didn't take me long to "catch on" to the situation. I ran across and caught him, slammed him down across a market bench and was about to "smash his face," when all at once I concluded I had better take him in

first and see what damage he had done. So I jerked him up and rushed him into the office. The school had just recessed for the noon hour; so that two hundred children, perhaps, were crowded about the doors in front. The "strong box" and the cash drawer of the safe had been pried out, but not a cent was gone; the man outside had whistled "git." While I was holding to the "thief" just there and then, that "third man" shoved up to my side, and pulling out a roll of bills as thick as my wrist asked me to take pay for a lot of hay he wanted sent to his barn. "What's the matter with you?" said I; "don't you see I'm holding on to a thief?" Just at this point my nephew said: "That's one of the gang, too, Uncle Dan." So I reached and grabbed him also by the collar. The doors outside were blocked with children twenty deep. Some one had called, "Police" (the station house was just at hand), and two policemen hurried in. The "chaps" were landed in the "boose." While they were being searched, the third man (a big fellow) shook his finger in my face and said: "You'll rue the day you laid your hands on me." "I may," said I; "but you, I think, will rue it first."

They were indicted by the grand jury for "entering a store house, in the day time, for felonious

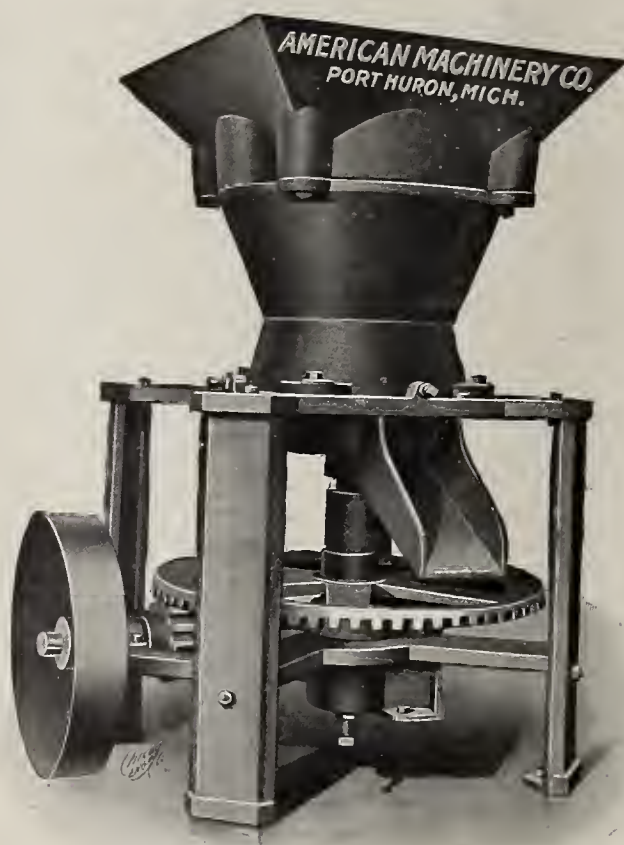
arrested for a bank robbery and sent to a penal island somewhere in the ocean (so I read in the papers) and from which point he escaped, also with the assistance of his backers, the "syndicate," with a ship, although it was given out that he escaped in an open boat. He is probably at large today. If so, he must be a man sixty-five years old.

These are experiences to be met with in the grain business now and then.

AMERICAN EAR CORN CRUSHER.

The crushing of ear corn demands the use of a machine not only guaranteed to reduce the ears but at the same time to allow the entrance and passage of foreign matter, such as stones, pieces of metal, etc., without resulting in the breaking or destruction of the crusher.

While the above principle is exceedingly important, it is just as important to accomplish this reduction of the ear corn with a minimum outlay for power; and perhaps one of the features that have gotten the grinding of cob into disrepute has been the enormous consumption of power for the crushing process. In the American Ear Corn Crusher this waste of power has been practically eliminated



AMERICAN EAR CORN CRUSHER.

purposes," and held for trial in the county jail for quite a little while. Henry J. Booth, the best attorney in the city, defended them, and Joseph H. Outhwaite was the prosecuting attorney for the state. They were found "guilty" and sentenced to the Ohio penitentiary for five years each. While they were in the jail and being tried, the "syndicate" had time to show its hand and manifest its wealth. Pleading letters came to me, at first as from a suffering mother, for her poor, misguided son; and then attorneys came; but none could bring the mother to me, face to face, as I suggested they might do. At last a proposition came that I might "go abroad" and take a friend. "If you will go, the money is at hand," the spokesman said (poor fellow, he is long since dead); but he didn't know his man. The one who stood on guard and got away, I'm told, was Blinkey Morgan; the one who entered from the rear and broke the safe was Eddie Guerin; and the third, the one who wanted "hay," his name was Woolf, the three being what was called "the Blinkey Morgan Gang." Morgan himself was later executed here in the penitentiary for murder. Guerin and Woolf, when released, went back to the same old business. Guerin killed a policeman in Ravenna, Ohio, in a freight yard at night to release a friend (perhaps Woolf) who had been taken for a fur robbery in Cleveland; and he had to "skip" the country to France, where he was

by the high differential given, covering the leverage of the power as applied to the crushing parts.

In the cut it will be readily seen how this leverage is obtained by using a small pinion operating against an extremely large rotating gear, thus multiplying the power applied to the pinion by five as applied to the crushing parts. It is possible to reduce ear corn with this crusher to such absolute fineness that even the kernels of corn are reduced; yet, when foreign materials enter the machine, the construction of the crushing parts is so exceedingly heavy that they are able to resist breaking and the presence of such an obstruction merely results in the throwing of the belts, thus stopping the machine.

One of the cardinal principles of the American Machinery Company of Port Huron, Mich., in the manufacture of its machinery is to send out any of the machinery bearing its name on trial and to allow the party to operate it for 30 days and thus demonstrate for themselves whether the machine is all that has been claimed for it or whether the machine is the one the party wants. The value to the purchaser of this method can hardly be overestimated.

Application to the American Machinery Company of Port Huron, Mich., will bring descriptive matter, quotations, etc., and such application is desired and requested.

[For the "American Elevator and Grain Trade"]
**RIGHTS OF BONA FIDE SUBPURCHASER
 FROM INSOLVENT OR FRAUDULENT
 PURCHASER OF GRAIN.**

BY J. L. ROSENBERGER.

Member of the Bar of Cook County, Illinois.

The Supreme Court of Ohio thus summarizes the case of Baltimore & Ohio Southwestern Railway Co. vs. Good, 92 Northeastern Reporter, 435: G. sold a car of oats to B., terms cash on delivery, the weight to be ascertained and certified by the official weigher of the Cincinnati Chamber of Commerce, of which both were members. G. at the time of sale gave B. a delivery order on the carrier in whose custody the car was to deliver the car to B. or to B. or order. B. sold the oats to M., and transferred to him the delivery order. M. sold the oats to G. B., who surrendered the order to the carrier and ordered the car turned over to another carrier, which was done. M. on account of the sale to him paid B. \$400, and G. B. paid M. \$250. B. was insolvent, and G. replevied the car in the possession of the carrier which had received it for G. B. It is held that G. was not entitled to recover the oats.

The court holds that in sales of specific chattels for cash on delivery, delivery and payment are concurrent acts, and delivery in the expectation of receiving immediate payment is not absolute but conditional, and when there is no waiver of payment the property does not pass until the price is paid.

But in a sale for cash on delivery, when the goods are in the custody of a bailee, and the vendor without requiring payment gives to the vendee a delivery order, directing the bailee to deliver the goods to the vendee or to his order, intending to transfer both the property and possession, and the bailee pursuant to the order delivers the goods to a bona fide purchaser from the vendee, the delivery is as to the innocent purchaser absolute and not conditional, and the title of such subvendee, as he may be called, is good against the seller, although the sale between the vendor and vendee was fraudulent.

In this oats case no presumption or waiver, the court says, would arise merely from the delivery of the car to the buyer, for by the rule of the Chamber of Commerce the sale was for cash on delivery and the sum to be paid could not be ascertained until the oats were weighed, which by the usage on 'change was to be done by the official weigher as the car was unloaded, so that delivery would not be complete until the oats were weighed. But if by the usage on 'change the delivery of a delivery order was the delivery of the oats, and 80 per cent of the estimated price was then payable and the balance when the weight was officially certified, then G. waived payment in cash on delivery when he gave the delivery order without the cash payment, and the 80 per cent either was payable on demand or credit, for the whole price was extended to B. until the weight was officially certified, and the title of an innocent subvendee from B. would be good against G. And, independently of the usage last referred to, when it is considered that the sale was made on 'change by one dealer to another dealer and not to a consumer, and that a delivery order was given directing the delivery not merely to the buyer but to him or his order, the conclusion must be that G. assented to a sale and delivery of the oats by B., and that it was the intention of G., by the sale and the giving of the delivery order, to transfer both the title and the unconditional possession of the property to B.

The transaction, though fraudulent on the part of B., was not void but only voidable. If the delivery without payment was merely a waiver of immediate payment, or an extension of credit, it may be that the as between the vendor and the vendee the vendor could have protected himself; for it is an implied condition in a sale on credit that the buyer shall keep his credit good. G., as against B., might have repudiated the transaction, but he could not do so at the expense of an innocent subvendee (subpurchaser).

It is true that a delivery order, unlike a bill of lading, is not considered a symbol of the goods, so that a transfer of it is constructively a delivery of

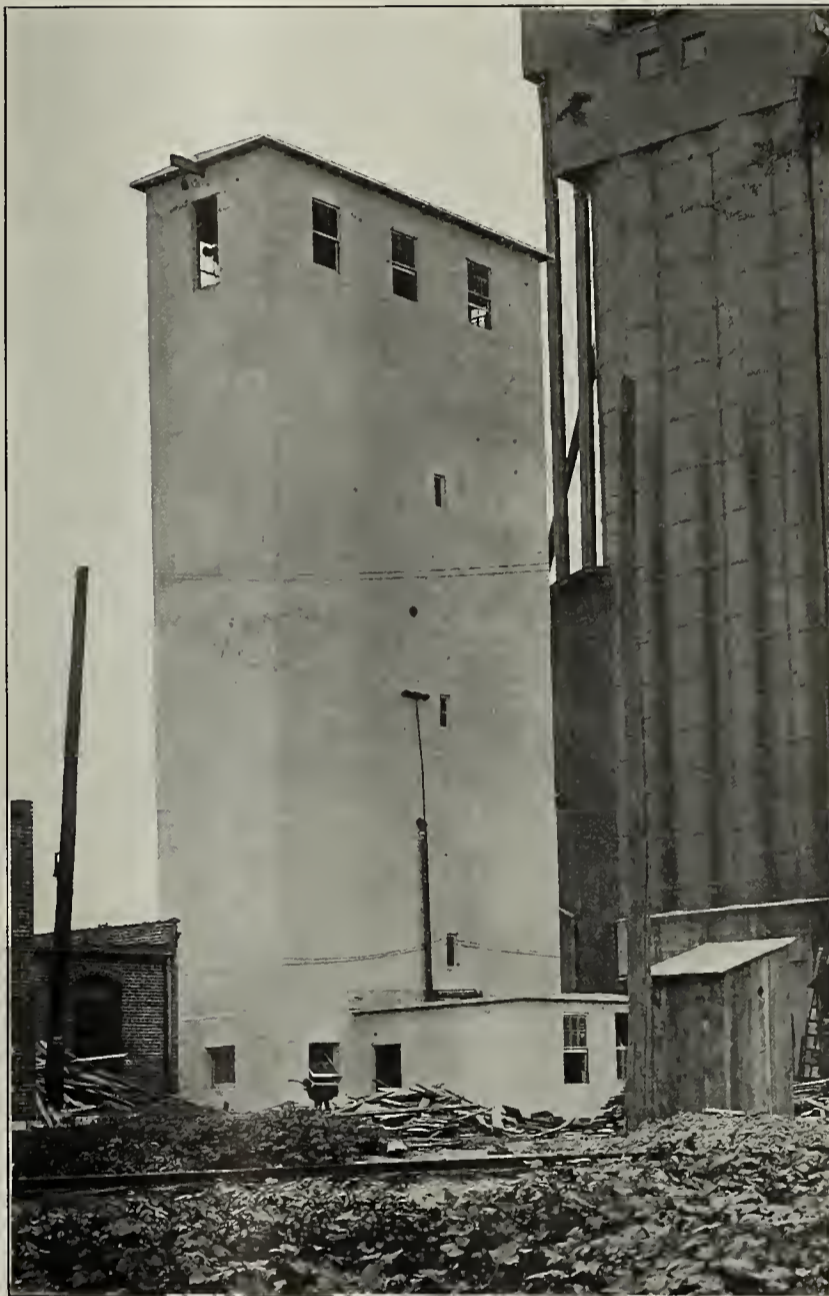
the goods, but it is considered a request in writing by the owner of goods to his agent or bailee having custody of the goods to deliver them as therein directed, and that the seller may revoke the order against an innocent subvendee of the goods and transferee of the order. But when the order has been executed and the goods have been delivered to an innocent subvendee or the bailee has attorned to him, it is too late to revoke the order. As to him there is nothing to revoke; the delivery has been actually or constructively made and the goods are no longer in the possession of the seller but in the possession of the subvendee (subpurchaser) or in the possession of his agent.

A REYNOLDS BLEACHER PLANT.

Our illustration shows a reinforced concrete bleacher plant recently constructed at the Ter-

top of the bleacher. In this way the bleacher compartment is kept filled. The purifying action being continuous, the grain is drawn off, after being submitted to sulphur treatment, into one of the vacant storage bins. In this compartment it is allowed to season while the adjacent bin is being filled. On completion of the run into the two bins, the first bin is emptied upon the return strand of the belt conveyor and delivered into the steel storage bins of the Terminal Elevator; and the process is repeated during both night and day when desired.

The plant is driven by an independent engine located under the storage bins, which operates all of the machinery for the reception from and delivery of grain to the Terminal Elevator and also drives the Reynolds apparatus, so that the purifying process may be continued night and day independently of the operation of the main elevator machinery.



REYNOLDS GRAIN BLEACHER PLANT AT KANSAS CITY, KAN.

terminal Elevator, Kansas City, Kansas, which has some interesting features.

The Terminal Elevator is a steel bin structure erected by the Macdonald Engineering Company, six years ago, with a capacity of 600,000 bushels. Several purifying devices have been tried out at this plant; but the necessity for housing the grain in the steel bins immediately after purifying by the old methods exposed the steel plates to an action that might in time become injurious. In the new plant, the Reynolds method was adopted, providing sufficient concrete storage in the bleacher plant for several hours' run, and in this the grain coming from the bleacher is seasoned before being stored in the steel bins.

The bleacher has a capacity of 3,000 bushels per hour, and is built between two concrete storage bins of 5,000 bushels each. Grain to be purified is drawn from the steel storage bins on a belt conveyor, which delivers it into the elevator leg located in the bleacher plant, and is elevated into the

The plant is provided with storage for two loads of bulk sulphur, and the engine and machinery are housed in a separate annex building of reinforced concrete.

Don't be too liberal in buying. Farmers naturally want as much as possible. Discriminate between good and poor. Teach the farmers to be careful. The press reports get the quotations of the lower grades daily. See that your local papers publish them. That will show the farmers the difference. It will help you to avoid trouble and losses.—C. A. King & Co.

New Orleans for the crop year ended on August 31 exported 6,771,393:18 bus. of corn and 520,608:30 bus. of wheat, against 5,139,206:34 bus. of corn and 1,156,395:40 bus. of wheat for the previous year. Of the corn in 1910-11, 2,659,847 bus. went to Latin America and West Indies, 875,758.42 to Belfast, 684,500 bus. to Liverpool, 412,581.44 to Havre, 420,000 bus. to Copenhagen, and so on.

[For the "American Elevator and Grain Trade."]

PHILADELPHIA GRAIN ELEVATOR FACILITIES: READING RAILWAY SYSTEM.

BY EDWARD R. SIEWERS.

The future outlook for the Philadelphia market's ability to absorb both Western corn and oats in greater quantities than ever, and particularly "No. 3" grain, is certainly very promising for the domestic trade; and for the export trade also. Since the city of Philadelphia, the state of Pennsylvania, and the United States government are expending millions of dollars in the construction of modern piers, wharves and docks along the Delaware River front, and the deepening and widening of the harbor and channels of the river sufficiently to readily admit the largest and deepest draught steamships and cruisers to any point about this port, as well as other extensive improvements of an up-to-date character, yet to be made in the Schuylkill River, there is no more important movement that is of interest to the grain trade throughout the country, and the allied business and shipping circles in general, than the proposed reorganization of the grain elevator system at Philadelphia by the leading transportation companies which have terminals here, in order to keep closely in line with the rapidly increasing

sufficiently large to weigh 80,000 pounds at a draft, covering about the amount of grain contained in an average carload. From the scales it is distributed through spouts to the desired storage or shipping bins.

It often happens that the condition of the incoming grain in cars makes it necessary to have chaff, dirt and other foreign substances removed from it before the grain is weighed and deposited in the storage bins. In all such cases the Chief Grain Inspector of the Commercial Exchange places a ticket on the side of the car of grain before it is put into the elevator, marking plainly on such ticket, "Blow," or "Blow Hard," as the condition of the grain requires. The work of blowing, or cleaning, the grain is accomplished before it is passed to the weighing scales and in this manner: As the grain ascends the elevator, and when it reaches the top, the buckets containing the grain are dumped, and in the descent the grain passes directly in front of powerful fan blowers that separate the grain from the chaff, or dirt, allowing none but the cleaned product to flow into the weighing scales.

Two steam engines are located in the elevator proper, on what is termed the scale floor, which is 130 feet above the ground. Steam is supplied to these engines from two water tube boilers, located

time allotted for extracting the moisture. Heat is supplied by a line of steam pipes, running from the boilers located on the wharf and passing through a set of steam coils in the drying plant. Cold air is passed steadily over the steam coils by large and rapidly moving fans, at a temperature of the air, varying from 150 to 160 degrees, and this hot air is forced into the racks and garners containing the grain to be dried. The vapor arising from the treatment of the damp grain exudes through ventilators at the top of the dry house. From the racks and garners the dried grain flows into storage bins, from which it is carried by conveyors back to the elevator where it is stored and is in readiness for export. The capacity of this grain drying and re-conditioning plant is 15,000 to 20,000 bushels in ten hours.

There are 12 elevator legs located on the inside on each face of the Port Richmond Elevator, twenty-four legs in all, the combined receipt and delivery capacity of grain for storage or for vessels loading from the bins by these twenty-four legs approximating 70,000 bushels per hour.

The quickest time made in loading grain for export from this elevator was on Sunday, September 17, 1899, when the steamships "Riverton" and "Coverdale" were loaded with full cargoes of oats, footing up 450,000 bushels, within the limit of ten hours, amounting to 7,200 tons. In 1900 the yearly record was made when 22,527 cars were received and stored, and 24,702,652 bushels of grain for export passed through the elevator.

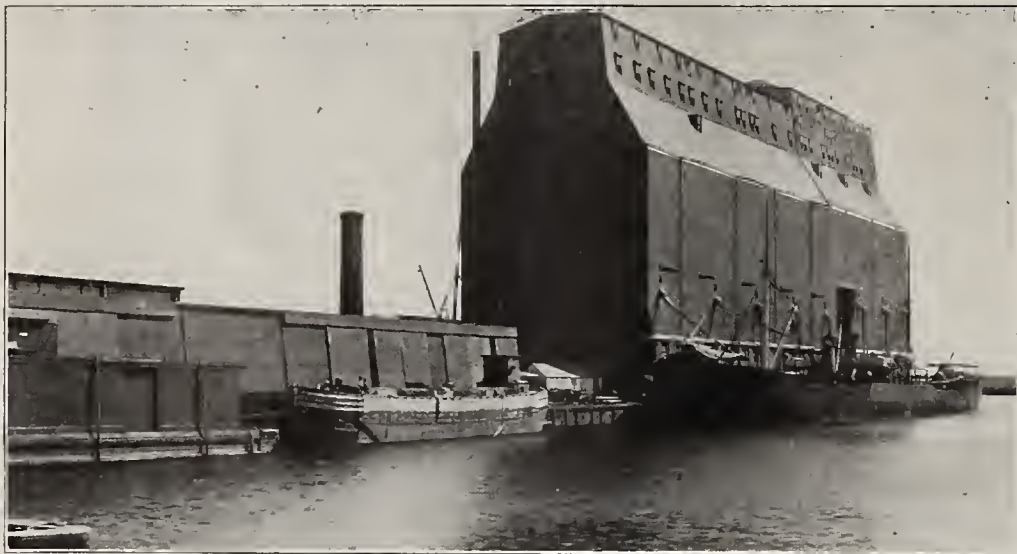
The grain reaches Port Richmond terminal over the Philadelphia and Reading Railway tracks and arrives principally from the great grain producing states of the West and Northwest, including Minnesota, North and South Dakota, Montana, Wyoming and Nebraska, while Ohio, Illinois, Michigan, Indiana, Missouri, Iowa, Kansas and Oklahoma are among the regular contributors. From Philadelphia the grain is largely exported to the leading ports of the United Kingdom—London, Liverpool, Leith, Dundee, Glasgow, and to the Continental ports of Hamburg, Amsterdam, Antwerp, Rotterdam, Copenhagen, and the principal Baltic ports including St. Petersburg, Russia.

The local trade is supplied by the Reading Railway system at the Twentieth Street Elevator, which has a storage capacity of 400,000 bushels, a receiving capacity of 100 cars every ten hours, and a delivering capacity of 100,000 bushels during the same time.

Out of 423 reports received by S. W. Strong, secretary of the Illinois Grain Dealers' Association, 357 reports say that there is 6.52 per cent of the corn crop of 1910 remaining or 26,992,000 bushels, while 424 reports give the present condition of the growing corn crop as 88.22 per cent, indicating a crop of 365,000,000 bushels for the 1911 crop.

At Philadelphia the Pennsylvania Railroad Company has declared its intention to build an elevator to be located at Greenwich. Plans for this house call for 1,000,000 bushels storage capacity and an equipment of the latest appliances for the rapid handling of grain, together with a drying apparatus similar to the one now in use by the Reading at its Port Richmond Elevator. In deciding to erect the elevator at Greenwich Point the Pennsylvania Railroad has conformed to the wishes of shippers, who pointed out that Greenwich offered a much better location, being accessible at all times, and which would remove the danger steamships encounter in proceeding to Girard Point when ice is in the river.

The demand for more seaboard elevators has been uncommonly insistent this season, and the present congestion of public elevators in all parts of the country has no doubt been behind the present movement to increase space and loading facilities in certain quarters. In order to provide for the continually increasing volume of grain which is pouring into Montreal on lake and river steamers, and which during the present season of navigation has not only threatened to but has at times caused a state of congestion, the Harbor Commissioners have decided to increase the capacity of their new No. 2 elevator, which is being built close to the Victoria



PORT RICHMOND GRAIN ELEVATOR OF THE P. & R. RY., PHILADELPHIA.

and steady flow of all manner of grain from every section of the West, thus assisting very materially the comprehensive plans now being developed to make Philadelphia the greatest grain receiving and shipping market in the East, along the Atlantic seaboard.

The Port Richmond grain elevator of the Philadelphia and Reading Railway, located at Pier B, is at the present time the largest and most complete of its kind along the upper Delaware River front, having a storage capacity of one million five hundred thousand bushels of grain, and is the only one along the Delaware equipped with a grain drying system.

The Philadelphia Grain Elevator Company was organized in 1878 by Charles M. Taylor, assisted by President Francis P. Gowen of the Philadelphia and Reading Railroad Company, when funds were secured to construct the elevator at Port Richmond; and the elevator is now practically owned and controlled by the latter corporation, O. H. Hagerman being the general manager of the plant. The work of laying the foundation of the pier sub-structure was begun in 1880 and the elevator completed and ready for business in April, 1881, the original capacity being one million bushels; but beginning with May, 1898, and finished in December, 1899, an addition was erected which increased the storage limit by five hundred thousand bushels. The dimensions of the elevator proper are: width, 80 feet; height, 165 feet; length, 305 feet, there being ample dockage space between the adjoining piers.

Grain is unloaded from the cars into sixteen hoppers, located on the side of and below the track level. From these hoppers it is conveyed to the top of the elevator and then deposited into scales

on the elevator wharf, and carried through pipes ten inches in diameter. One hundred pounds steam pressure per square inch, is required to operate the engines, which perform all the functions of lifting the grain from the cars to the storage bins and subsequent delivery of the same to steamships loading cargoes of grain for foreign ports.

In these days of rapid business methods, and the varying and uncertain atmospheric conditions, the grain sent to the elevator from all sections of the land is often more or less damp, musty, or contains too much moisture for a successful sea voyage, which to a great extent affects its commercial value; besides, if shipped abroad, this condition provokes complaint from European receivers that occasionally results in a disastrous embargo being declared, as a radical penalty for careless inspection methods. To re-condition, then, grain of a faulty character, a modern Hess Grain Dryer is annexed to the Port Richmond Elevator. This drying apparatus receives the grain from the elevator by belt conveyors which traverse the entire length of the elevator building, the grain being delivered at the top of the dryer at a point 65 feet above the base. There it is stored in a garner from which it is drawn to the dryer proper, consisting of a series of pans or racks placed at an angle of 45 degrees from the vertical line. Each of these will hold 500 bushels of grain, and all are controlled by a system of valves, or slides, which allow only a portion of the moist grain to pass from one vertical compartment to the next. The grain to be dried is passed through three of these compartments and is allowed to remain in each compartment a sufficient length of time to accomplish the desired results, varying from 15 to 20 minutes, the

Pier, by 848,000 bushels, as has been previously announced in these columns. The new elevator was originally planned to hold 1,772,000 bushels, and is expected to be completed and in full operation by the spring. The newly-planned addition, however, will scarcely be finished before the early fall of 1912.

INSPECTION MATTERS.

The millers of Kansas have begun an agitation for a change of the grain grading laws of that state to provide specifically by law that wheat may be bought on the basis of pure grain, with cash dockage for dirt, etc. At the August meeting of the Southern Kansas Millers' Club, a leading miller from the famous Sumner County, declared his personal knowledge of adulteration by weed seeds and other dirt to the extent of a pound and more per bushel, and claimed that Kansas wheat this year is unusually dirty. A direct appeal to the Grain Grading Commission, however, was a failure; that body "did not see its way clear to extend authority to millers to make the deductions" they ask for.

In the meantime the farmers near Abilene have opened the campaign "for the defense" by addressing a petition to Gov. Stubbs, asking him to change the grain inspection department's ruling on grades of wheat to eliminate the following section: "Wheat containing one per cent and over of weed seeds or other objectionable matter shall be graded No. 4 or Sample according to the amount it carries." A large amount of wheat, say the farmers, contains one per cent of foreign matter, yet has been graded higher; and they ask that the old grades shall be restored.

State Grain Inspector D. R. Gorden objects to the change asked for. "We made it to protect the wheat trade," he said. "Western Kansas has thin wheat and much seedy wheat which goes to the bottom of the load and weighs heavily. One car reported for Winfield had 2,700 pounds of weed seed, yet was bought for No. 3. We allow $\frac{1}{2}$ of one per cent in No. 2, $\frac{3}{4}$ of one per cent in No. 3 and one per cent in No. 4, though all should be absolutely free from seed and other foreign matter. It is only right that wheat should sell on its merits and this ruling tends to make it do so."

The Wichita Board of Trade unofficially objects to the State Inspector's method of reducing the grade for dirt, holding that the presence of weed seeds should not change the grade of wheat, but that the shipments should be docked for the percentage of weed seeds it contains.

The examination of candidates for appointment to be grain inspectors was held by the Dominion Board of Grain Examiners at Winnipeg recently and of nineteen persons examined, twelve were accepted, three as qualified to act as inspectors and nine as deputy inspector.

In the course of the examination candidates had to pass on 100 samples of grain which had been previously graded by the chief grain inspector and grain examiners. Each sample was designated by a number only, and the candidate was required to grade it and enter on the sheet the correct grading, according to his opinion. These sheets were then checked with the key list of the samples of the examiners, who, at no time were aware of the identity of the person under inspection. Some of the examiners were constantly in attendance while the candidates were grading the sample, and the latter were not allowed to communicate with each other or otherwise receive any information whatsoever.

The Public Service Commission of the state of Washington has adopted new rules for the inspection of grain in that state, now effective. The Commission has decided to enforce a graduated cash discount for smut, to apply in the absence of a specific contract to different effect between buyer and seller.

The grading of wheat will be based on a pure grain of 58 pounds weight for No. 1 grade, the discounts for smut to be based on five degrees of smut, the first being the least amount of smut that will affect the price, while the fifth grade is the

greatest amount that the grain can contain and remain marketable. In event, therefore, that there is no contract between the buyer and seller, the Commission fixes the following amounts to be deducted from the contract price for smut:

No. 1, 2 cents a bushel; No. 2, $3\frac{1}{2}$ cents a bushel; No. 3, 5 cents a bushel; No. 4, $6\frac{1}{2}$ cents a bushel; No. 5, 8 cents a bushel.

When wild oats or other chaff are found in the grain in sufficient amounts to affect the value, the amount of foreign matter is to be determined by cleaning the samples and weighing the offal on special scales built for that purpose to show the actual amount of foul stuff in a bushel.

The Commission further directs that when hay falls below No. 1 grade, 15 per cent is to be deducted from the selling price for No. 2 grade and 25 per cent for No. 1, when the hay falls to No. 3 grade.

The rules provide that when either hay or grain gets no grade, and is of inferior quality, then the Commission will exercise no jurisdiction as to value.

J. N. Barncard, the veteran chief deputy grain inspector, in charge of the state inspection office at Minneapolis, has resigned his position as chief dep-



J. N. BARNCARD.

uty, effective September 1, and has been succeeded by G. H. Tunnell. Mr. Barncard has been connected with the grain office at Minneapolis continuously since 1885, with the exception of a short period during the administration of Gov. Lind. Mr. Barncard will remain in the office in an advisory capacity.

Mr. Tunnell has been with the office since 1889, and his appointment as Mr. Barncard's successor is a promotion, in accord with the civil service policy of the Railroad and Warehouse Commission.

The managers of the Minnesota State Fair have made arrangements for a grain grading exhibit at that Fair, directed by State Inspector Eva or his deputies. The exhibit will include a demonstration of all the processes used in grading Minnesota grain and everything will be done as in the practical work. Each process will be explained by competent inspectors of the department. It is hoped that by attention this exhibit in the agricultural department of the Fair the farmer may learn just how to grade his own grain. He will be shown just what makes a deterioration in the grade of his wheat, oats and barley and be given information that will be valuable when preparing his grain for the market.

The Inspector of Grain at Fort William, Ont., in order to keep check on the condition on arrival abroad of grain shipped by Fort William inspector, in a letter to the Board of Trade, Liverpool, makes the following suggestion:

"As we keep an average sample of every cargo of wheat, oats, barley or flaxseed, shipped from Fort William of Port Arthur, it would very materially assist if each miller would send me a mail sample

of the grain received by him, the sample he sends being an average, neither the best nor the worst.

"As my inspection certificate carries with every cargo shipped from here, the miller should insist upon the production of the certificate, so that he can obtain the name of the vessel carrying the grain from these ports, also the grade as well as the date of shipment. Upon receipts of miller's samples, I will compare it with ours and let him know the result.

"My aim is, if possible, to prevent the adulteration of our wheat after it leaves here, either at Buffalo, New York or Montreal, or at any port in Great Britain."

The Wisconsin State Civil Service Commission on September 1 held an examination at Superior of the fifteen employees of the Grain and Warehouse Commission.

MOISTURE TEST PETITION DENIED.

The Illinois Railroad and Warehouse Commission, on September 6, published its answer to the petition of the Illinois Grain Dealers' Association, asking that the corn grading rule defining No. 3 corn be amended to insert the word "approximately" before the moisture test limitation of the rule of 19.25 per cent. The petition, it will be remembered, was argued before the Commission on July 25, and was based on the resolution of the Association adopted at the Bloomington meeting as follows:

Whereas, The present moisture test rule, with reference to the inspection of corn, put in effect about two years ago by the Railroad and Warehouse Commission and rigidly enforced (and properly so) by the Chief Inspector of Grain at Chicago, has, after a thorough trial, proven impracticable and has resulted in a serious loss to the producer and country shipper of grain; be it

Resolved, By the Illinois Grain Dealers' Association, in convention assembled, at Bloomington, Illinois, June 14th, 1911, that the Railroad and Warehouse Commission be requested at the earliest possible moment to eliminate from the inspection rules of this state the moisture test as THE determining factor in the inspection of corn, believing (as we do that) the present rule, if in effect after October 1, of this year, will result in further serious loss to the producer and country shipper of corn. And the Secretary of this Association is hereby instructed to send a copy of this resolution to the Railroad and Warehouse Commission and to the Governor of the state.

The Commission in denying the petition accompanied that decision by a lengthy opinion in support of such action, as follows:

In support of the petition it is claimed:

1st—That the moisture test should not be the determining factor in fixing the grade of corn—

(a) Because the mechanical appliances now in use for determining the moisture content are not sufficiently accurate and admit of too much variation to constitute them dependable devices for so important a purpose.

(b) Because the intrinsic value of corn containing more than 19 $\frac{1}{4}$ per cent of moisture might entitle it to a higher sale price than would accrue to other corn of less moisture content but carrying other disabilities.

2nd—That the moisture test affords a means by which a parcel of corn containing one-tenth of 1 per cent of moisture in excess of the maximum of the grade contracted may be applied on contract at an unreasonable and unjust discount.

Let us look into the wording of the complaint wherein it is held primarily that the moisture test should not be "THE" determining factor.

If the moisture test is to be retained as a factor of any degree, an analysis of the phraseology of the rule must disclose that degree, either by the indefinite article "A" or by the definite article "The." If in the phraseology of the rule no other requirement be found than that the corn to be graded shall contain no more than 19 $\frac{1}{4}$ per cent of moisture, the definite article "The" is placed in the interpretation of the rule and the moisture test is declared to be the sole determining factor.

If, however, a reading of the rule discloses specifications other than that of the moisture test, the indefinite article "A" at once goes into the interpretation and the moisture test takes its place as a determining factor, to become the determining factor whenever its volume shall have exceeded its prescribed maximum.

To illustrate: To receive the grade of No. 3 white corn shall be (1) 98 per cent white; (2) shall be sweet; (3) shall contain no more than 19 $\frac{1}{4}$ per cent of moisture; (4) shall contain not more than 10 per cent of cob-rotten, exclusive of bin-burnt and ma-

hogany corn; and shall contain not more than 4 per cent of dirt and broken grains. Here we find eight determining factors, of which six, by exceeding their prescribed maximum, and two, by existing at all, may become the determining factor in fixing the grade.

By comparative tests and experiments, aggregating thousands, conducted by our inspection department, by all the principal terminal markets and by the United States Department of Agriculture in numerous laboratories located in all parts of the country east of the Rocky Mountains, it is shown, by evidence remarkable for its unison, that the moisture testing machine now available will, when properly handled, give perfect and unvarying results, and that a high degree of proficiency can readily be attained by operators of ordinary intelligence. It cannot be denied that well matured, sound, sweet and perfectly clean corn containing 19¼ per cent of moisture is of higher intrinsic value than well matured and sweet corn containing only 19 per cent of moisture but carrying 15 per cent of unsound corn and 1 per cent of dirt. The comparison might be carried still further to discredit the rule by proving the wide difference between the intrinsic value of well matured, sound, sweet and perfectly clean corn containing 19.1 per cent of moisture and corn containing 10 per cent of cob-rotten, 4 per cent of dirt and broken grains, both being given the grade of No. 3. Even then it would be no argument against the established moisture maximum of 19¼ per cent.

In every average crop of corn there is a certain percentage each of several qualities. Running through a period of years, tests, experiments and comparisons have developed a classification of uses to which these several qualities may be put. In order that any one of the classified users may designate his choice of qualities, all requirements have been fitted to natural conditions and distributed into grades with maximums and minimums definitely fixed, so that buyers and sellers may make their contracts with the assurance that in their fulfilment they may not be subject to manipulation or to the caprices of individuals. After selecting from a crop of corn that part which is perfect, to be graded No. 1, the process of selection continues until all of that quality acceptable to the second class of users, more general than the first, has been given the grade of No. 2. With the two higher grades determined, our attention is directed to that more intermediate quality which comprises the great bulk of the corn; and here the requirements become general.

In defining the maximums and minimums of this grade we must ascertain the number and kinds of uses to which this quality, which had been denied admission into the next higher grade, can be put. All other specifications being agreed upon, we come to the moisture content. We begin adding moisture and continue until the question is raised as to keeping qualities, both for storage and for shipment. Resultant tests show that corn of moisture content in excess of 19¼ per cent is positively unsafe for storage and shipment, even in climates most favorable to it. The maximum in the Uniform Rules is accordingly fixed at 19 per cent; and this great commercial quality is given the grade of No. 3.

It is therefore clear that to raise the maximum moisture content of the grade would be to disqualify it as the basis upon which to predict purchases and sales for the movement of the one hundred millions bushels of surplus corn of the state of Illinois alone. Thus we see that regardless of what the other qualities of a parcel of corn may be, any comparison offered to discredit the existing rule will suggest that instead of disqualifying the grade of No. 3 as the commercial grade by raising the moisture maximum of 19¼ per cent, the inconsistencies of the rule might be corrected by beginning at the minimum of the grade No. 2, as to the other qualifications than moisture, namely, 5 per cent cob-rotten and 2 per cent dirt and broken grains, and decrease the maximum moisture content in the same proportion as the percentage of cob-rotten and dirt and broken grains increase.

THE CAUSE OF THE COMPLAINT.

The principal cause of complaint, we believe, resolves itself into one of discounts. This cause is as old as the custom of barter itself, and will continue to subsist so long as men will insist upon selling something they do not own and before its qualities can be determined. Buyers of corn, like buyers of anything else, naturally seek the least line of resistance; and the fewer the hazards one is required to assume, the more he will pay for the privilege of trading. If the seller, at any time prior to delivery, elects to take his chances with the numerous conditions which may affect the quality of corn and thereby obtain a price in proportion thereto, he cannot reasonably expect the firm rule upon which his original agreement was based suddenly to become elastic, so that, by approximation, the burden of the disability he has brought upon himself may be shifted to the

shoulders of a disinterested and impartial inspection department.

It is claimed that in former years, when the fixing of grades was left to what the eye could see, the nose could smell, the tongue could taste, the hand could feel, and the scales would register, there was not so much trouble over discounts. It is further held that since the adoption of the moisture test a parcel of corn showing a moisture content of one-tenth of per cent in excess of the maximum of the rule has been discounted 2, 3 and 4 cents a bushel—a thing which could not be done if the word "approximately" were written into the rule and the inspector given authority to exercise his judgment and probably to certify the parcel as No. 3.

The truth seems to be that in the days before the advent of practical moisture testing machines, the same parcel of corn would have contained the same amount of moisture and would have been subjected to identically the same discount, according to the supply and demand, just as it is today, but the seller [then] had no way of knowing that that particular parcel thus graded and discounted contained only one-tenth of 1 per cent more moisture than a companion parcel which had been given the next higher grade.

Again, if the request were granted, and the word "approximately" should be written into the rule, it is clear that the change would not cure the ills complained of. To define and limit the meaning of the word would be again to fix a definite maximum; and not to prescribe its limitations would be to invest the inspector with unbridled

prayer of the petition to eliminate the moisture test or change the rule.

By order of the commission, Aug. 29, 1911.

(Signed) ORVILLE F. BERRY,
Chairman.

THE VICTOR CORN SHELLER.

Our illustration shows the Improved Victor Corn Sheller, manufactured by the Barnard & Leas Mfg. Co., of Moline, Ill. This sheller is well known from the length of time it has been on the market and it is claimed there are more in use than any other sheller.

It has been improved from time to time until it is practically perfect for its purpose, which is to shell the corn only. It is particularly adapted to elevators where it is desired to shell corn in the basement and separate and clean it in the upper part of the house. The separating of the cobs in cleaning of the corn is done by the Cornwell Corn Cleaner as advertised in this issue.

The manner of adjusting the shelling cone while running so as to regulate the shelling is peculiar to this machine and is said to be superior to anything on the market. With a few turns of the hand wheels the shelling cone is moved in or out as desired and can be locked in any position.

Another improvement is the spiral conveyor



THE VICTOR CORN SHELLER.

latitude and destroy the grade as a factor in making contracts.

A SUGGESTED SOLUTION OF THE TROUBLE.

The discounting of off-grade grain is a matter that for years has been the cause of more dissatisfaction to the shippers of grain to primary and terminal markets than almost any other feature of the grain business. These unsatisfactory conditions are bound to continue as long as the discounting is carried on entirely without system or supervision by exchange authorities.

The New York Produce Exchange realizing that a more intelligent method was needed, a system was devised and put in operation [there] a little more than three years ago that at once appealed to shippers as being so eminently fair that friction has been reduced to a minimum, if not altogether eliminated.

The committee on grain is empowered to appoint three "settlement committees," one each for wheat, corn and oats; and it is provided that on each of these committees there shall be a member of the grain committee, who gives to such sub-committees an official standing. It is the duty of the several committees to meet at a certain hour each day, generally at the close of the market, to receive all samples of "off-grade" grain intended to be applied on contracts and to arrange the discounts. The method of arriving at such differences is to determine what is a fair average price for the "off-grade" to be applied, from sales of it in the open market on that day; and this is then compared with the average price obtained for the contract grade in question, with the result that an equitable discount is established. Some such method as this, if adopted, we believe would prove satisfactory here and remove much complaint now charged to the moisture test.

In either case, the same objection will arise every time the inspector discriminates against the one-tenth of 1 per cent until the maximum shall have been raised to a point where it will comprehend the highest percentage of moisture nature can put into corn.

In view of all the facts, and, as we believe in the interest of the corn grower as well as the shipper and consumer, the commission denies the

beater. This beater is now used on all sizes except the No. 000 and No. 00 and is a big improvement as it does better work and breaks the cobs less.

The sheller consists of a receiving hopper, upper and lower casings, securely bolted to a very strong wooden frame and a shaft on which the beaters and shelling cone are fastened. This shaft runs in two very heavy and long journal boxes which are bolted to the wooden frame. The No. 3 and No. 4 shellers have an extra bearing outside of the pulley which renders them more substantial and greatly adds to their durability.

The teeth on the shelling cone and the shelling surfaces of the casings are chilled, thus giving these parts great durability. The cone is keyed on the shaft at both ends which prevents all vibration and makes it very rigid.

The hopper is so constructed that it cannot clog and insures a steady feed as long as the corn is passing into it.

This sheller has large capacity, is efficient and durable and is guaranteed to give best service.

In clipping oats help yourself by being careful. Some interior shippers are clipping their oats to help the weight and putting the clippings in with the oats. This is a mistake. The clippings or dirt heat the oats and hurt the grade. Several cars arriving here today are hot from this cause.—C. A. King & Co.

The Colorado Grain and Seed Growers' Association and the Department of Agronomy of the Experiment Station at Fort Collins are anxious to get information about all pure seed of whatsoever farm crops are grown in Colorado. The Experiment Station and the Seed Growers' Association are each going to keep a list, as complete as possible, of the different kinds of seed grown and the purity of the

same. The purity will be passed upon by the agronomist of the Experiment Station. All pure bred seeds will be pedigreed, all pure seeds will be registered, and others will be registered, giving the shortcomings which they may possess. It is hoped that by keeping up such a list, growers who produce good seeds can find a market and that the demand for good seeds can be supplied. During the past year the Agronomy Department could not begin to supply the demand, nor could it furnish the information asked concerning where good seeds might be obtained.

MONARCH CRACKED CORN SINGLE RUNNER HEAD BALL BEARING ATTRITION MILL.

The readers of the "American Elevator and Grain Trade" are undoubtedly familiar with the Monarch Ball Bearing Attrition Mill, which has now been on the market about a year and has met with unqualified success. The mill illustrated herewith, the Monarch Cracked Corn Single Runner Head Ball Bearing Mill, made by Sprout, Waldron



MONARCH SINGLE RUNNER HEAD BALL BEARING ATTRITION MILL.

& Company, Muncy, Pa., represents the same principles applied to a single plate mill.

This mill was designed primarily for the purpose of cracking corn, as with one head only in motion a smaller amount of fine meal is produced during the operation. This machine with ball bearings offers the same advantages in power economy and increased capacity as the double plate ball bearing mill. With it the makers guarantee a positive saving of one-third in power, and it is said the machine frequently exceeds the guarantee.

The grinding plates are the same as are used in the regular double head Monarch mill so the same work can be accomplished by giving the single runner head double speed. This single runner mill is particularly adapted for places where space is limited or where circumstances make a single drive belt necessary. Sprout, Waldron & Company will be glad to furnish full particulars as to sizes, prices, dimensions and weights to all interested millers who will write them at Muncy, Pa.

There is a tendency in all lines to contract ahead lightly. General business sentiment is not uproarious and the idea of "steaming ahead slowly" prevails. Rail capital is fighting for liberal interest returns on its capital despite the solid fact that 4 per cent of an ironclad investment is an excellent return on its capital, despite the solid fact that 4 and the worker in search of the cheapest seatable bacon faces a 29c per pound sign in the leading stores. For two years the auto industrial growth has helped a weak steel situation. Now, the experts declare "boom business" is a year to eighteen months away, that rail and steel labor may be liquidated. A procession of possibilities suggesting moderated consumption is on offer.—E. W. Wagner.

[For Mutual Fire Ins. Co. Field Men's Ass'n.]

PHYSICAL HAZARDS OF ELEVATORS.

BY C. R. McCOTTER.*

In looking up statistics under these two classes [fires originating within the building and those originating on the outside], I was surprised to find that 65 per cent of the total number of known fires reported to our company originated on the outside, leaving only 35 per cent having their origin on the inside. While it is impossible to estimate the per cent of unknown fires belonging to each class, I presume we are safe in assuming that half applies to each, which would not make a very material change in the above percentage. This might indicate that outside fires are much more costly, but it has been our company's experience that while there are nearly as many again reported, the total losses from inside fires are greater in the aggregate than from outside. I presume this can be accounted for to a certain extent from the fact that many lightning losses are small and that fires on the outside are easily put out in their incipency; but it also demonstrates the fact that greater care should be taken in keeping the interior free from dirt and not allowing rubbish to accumulate, so that there will be some chance to fight a fire when it is first started.

Fires originating in the power and cob houses and from friction are about equal in number, and compose fully one-half of all of the internal fires. Power and cob house fires of steam power plants are in many cases directly chargeable to the fireman, as

that this hazard is not fully taken care of by the charges for the additional machinery, but in my opinion we have got to get better conditions in the power house before steam power elevators will be put on as good a basis as gasoline. This can be accomplished by educating the foreman to the proper care of the property under his control and the elevator owner to the necessity of building standard power and cob houses.

A good many fires are caused by fires communicating through the cob spout to the cupola. I have thought that this hazard might be overcome by putting up the spout in such a way that it could easily be pulled down in case of fire. While there might be some disadvantages to this, I believe it would help to overcome a very serious hazard.

Fires originating in gasoline power houses do not seem to be very numerous; and from the information that I was able to collect, it would seem that the majority of these fires have been in the combined power house and office and caused by overheated stoves and defective chimneys rather than directly chargeable to gasoline power; but there is always a hazard to contend with wherever gasoline is used. We recently had a damage loss in Kansas, caused by a torch being held under the carburetor to warm up the engine so as to be able to start it. In some way this ignited the gas that had accumulated in the overflow pipe, which exploded. The force followed the course of least resistance and burst the supply tank, setting the gasoline on fire. The tank was well buried and 15 feet from the elevator, so that no other damage resulted. An elevator in Minnesota was burned last March from a similar cause. It is evident that some of the men in charge of gasoline power elevators are very careless or ignorant of the dangers of gasoline; and I believe it is up to the inspectors to get this corrected. There was an elevator in Kansas burned this last winter, caused by an overflow of gasoline, the engine being lower than the supply tank. This engine had a pump feed; but owing to the circumstances, the hazard was just as bad as if it had had a gravity feed. I do not suppose that this condition would occur very often, but it is the unexpected that causes a great many fires; and it is a hazard worth looking out for.

We will probably always have fires from friction, but it does seem that they are altogether too frequent. One reason for this is that continued use of machinery without any trouble causes the operator to feel secure and become careless, and he does not give the machinery sufficient attention. How many times have we had the elevator man tell us that he has been operating an elevator for several years without the least sign of a hot-box. I sometimes think that a warm journal once in a while is a good thing, as the operator then does not feel so secure and is more apt to give the necessary attention to the machinery, which is the best preventive of this class of fires.

Spontaneous combustion continues to be the cause of a few losses each year, in spite of our efforts trying to educate the assured to the use of mineral oil, the proper care of oily waste and sweepings and the necessity of frequently cleaning the dust and cob houses, which are the most common causes of these fires. We should not be discouraged, as there is no question that there would have been more fires if it had not been for our efforts. By continued work, we will be able to reduce the number of fires from this cause; and I think, at the same time, we will make a marked reduction in the unknown losses.

Overheated stoves and defective stove pipes cause as many fires as spontaneous combustion. This hazard is confined mostly to Northwestern territory, where elevators are built with a combined office and power house attached to the elevator, so that where the hazard exists at all it is really much greater than spontaneous combustion. It would seem that the best solution of this problem would be to advocate the building of the detached power house and office; but it probably would not be practical on account of the severe winters. The hazard can be overcome to a large extent by insisting on proper

*Extracts from a paper prepared for the Mutual Fire Ins. Co. Field Men's Association meeting at Chicago in May, 1911.

flues, the use of good stoves, and having floors properly protected from live coals. I have thought it might be a good idea to send out cards to be tacked up in the office similar to the "No Smoking" signs, calling attention to this hazard.

I will call your attention to only one more hazard on the inside, and that is the careless use of lanterns. It is a common thing lately in looking over the trade journals to read of fires caused by lanterns being dropped into bins or being broken in the pit or basement. There are many elevators in which it is necessary to use lanterns; and as long as the men in charge are careless with them, the careful owners will have to pay more for their insurance than they really ought to; and I believe it is up to us to get the ones in charge of the elevator interested in this and show them the necessity of being more careful.

Of fires originating on the outside, locomotive sparks have been by far the most expensive to insurance companies. While prospects are very bright at the present time for this hazard to be entirely eliminated by the adoption of the Van Horn-Endsley Spark Arrester by the railroad companies, it is a hazard that we will have to contend with in some places for a few years yet; and on account of the numerous losses from this cause, we should not stop our work in fighting this hazard. I am unable to say in what location most of the spark fires start; but sparks lighting on shingle roofs, in the cornices, on combustible material on the ground near the elevator, and sparks flying in through openings in the elevator have all been the cause of a great many fires. All of these fires could be easily eliminated by iron-cladding the building, cornices included, and by having no windows on the railroad side. This hazard seems to be greater on branch lines, as old engines are used for this traffic and the main lines get the best. Some of the state legislatures are passing laws making it easier to collect damages from the railroad companies for spark fires, and this probably will have a tendency to make them a little more careful; but it will not affect the man who has an elevator on leased ground, which exempts the railroad company from liability. I think that this is something that we should all keep in mind and try to influence the elevator owners when building to build on their own land, if possible.

The raising of the charge for shingle roofs to 50c is undoubtedly having a very good effect; and when it becomes necessary to replace the old shingle roofs, fire-proof roofing is being used, where it probably would not have been used if the shingle-roof charge had remained 25c. It seems that no matter how far a shingle-roofed elevator is detached from another building, it is always subject to a fire by the burning of an exposing building. We recently paid for an elevator which caught from a building 120 feet detached; and during the same fire, another elevator 250 feet away, was saved only by hard work. In either case, there would have been but very little danger had the elevator been covered with iron. We are always going to have grief from shingle roofs, even after the spark hazard is eliminated; and we should use our efforts with the contractors as well as with the elevator owners in having all buildings properly roofed.

While the total number of losses and damages by lightning exceed the number of locomotive spark fires, the money loss has not been nearly as great, according to the statistics of our company, and we presume this will apply to all. Until recently fires under this head have been classed as unpreventable, but believe that we now all agree that this hazard can be overcome, to a great extent at least, by properly equipping the elevator with lightning rods or by covering the elevator with iron and properly connecting the roof with the sides and grounding it the same as rods. If there is a telephone in the building, it is also necessary that the wires be properly grounded. We had an illustration of this, this past year, when an iron-clad elevator was burned by lightning going in on the telephone wire and setting fire to the office. We still find many people skeptical about lightning rods on account of the numerous swindles that have been put on the mar-

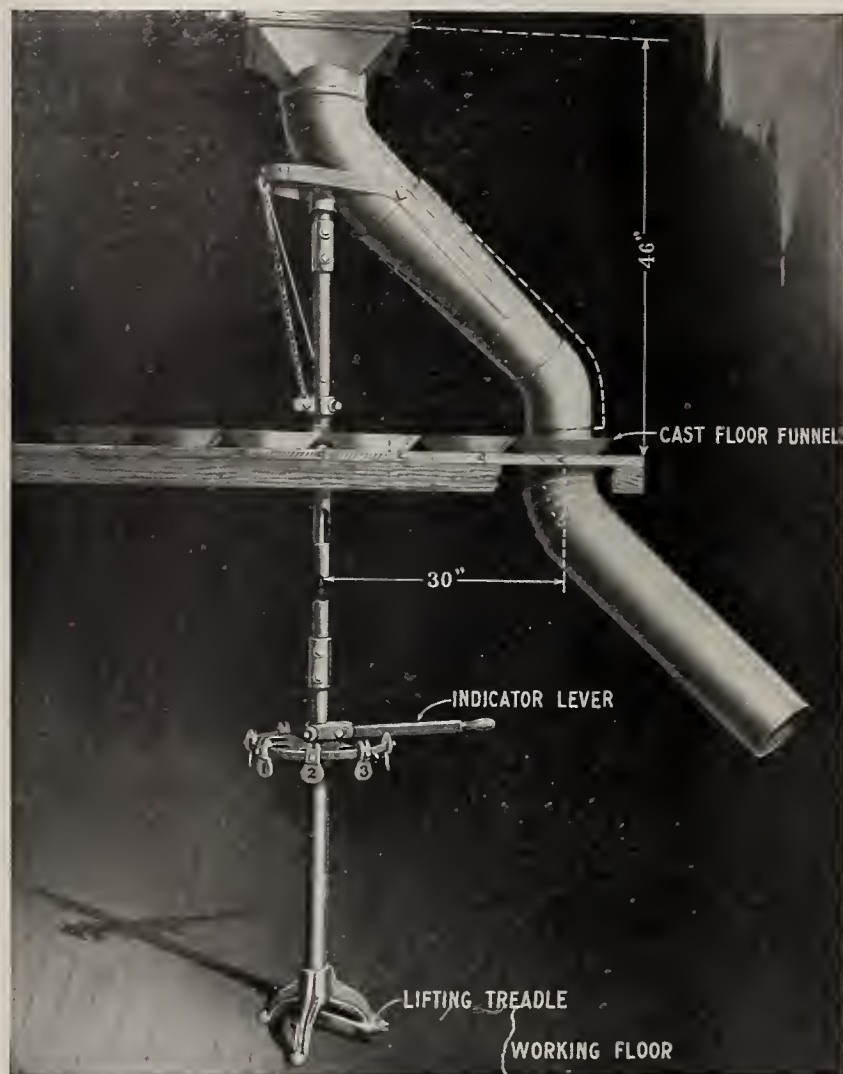
ket, but this prejudice is gradually being overcome; and it is my opinion that within the next five years we will see a great many elevators protected from lightning. Some of the successful farm mutuals have been giving a reasonable credit for lightning rod equipment for some time, and quite recently the Central National of Chicago has granted a credit of 20 per cent on farm property in Iowa and some other Northern states, when the buildings are equipped with standard lightning rods. This is the first stock company to allow a credit, and it is my opinion that other companies will soon put this rule into effect.

Fires caused by the burning of exposing buildings have been very costly, amounting to about the same as lightning losses. This is a hazard that is hard to eliminate, but we believe that where elevators are badly exposed by other buildings, we should carefully investigate the moral as well as the physical hazard of them and not put our companies on where the elevator is exposed by property that is

WESTERN IMPROVED DISTRIBUTOR.

The Western Improved Distributor, a new device, embodies principles not found in any similar device on the market today. It is primarily designed to meet the demands for a successful method of distributing grain as it is discharged from the elevator head or cleaner to various bins, storage tanks, or direct to cars, without mixing. Being operated from the working floor, it saves many steps and much confusion as compared with the old method which necessitated climbing to the turnhead every time a change was necessary.

The Western Improved Distributor consists of a combination of the Union Iron Works well-known ball-bearing turnhead, a cast iron floor funnel for each bin or distributing point, enough steel spouting with flexible elbows to connect, an indicator stand with numbers, an indicator rod and a lifting device. By simply placing the foot on the lifting treadle and bearing down slightly, the distributor spout



WESTERN IMPROVED DISTRIBUTOR.

unprofitable, and in all cases insist on an adequate exposure charge.

There is one other hazard which comes under the head that is worthy of our attention. That is tramps sleeping in box cars at the side of the elevator, and bunk cars that are set on sidings. We have had two or three fires from the first cause, and I think it is a matter worth calling to the attention of the assured. A lot of empty cars should not be allowed to stand along side of the elevator unless they are going to be loaded at once, as they are harboring places for tramps, and in dry towns they make a very convenient place for drinking. In cases where this cannot be avoided, the doors should be locked at night, so as to keep them out. I have known of several cases where bunk cars were set on sidings and allowed to remain close to the elevator. No good can come from this and in many cases harm can result. I think that most of our railroad companies have rules that these cars should be at a safe distance from all buildings so that all that is necessary to have them removed is to have the elevator owner take the matter up with the railroad company.

Minneapolis is getting liberal receipts of winter wheat, some days running 25 per cent of the total.

lifts clear of the floor funnel in which it rests. Then by turning the indicator lever, it will swing to any other funnel within the circle of its radius, their locations being indicated by the numbers on the ring of the indicator stand. Remove the foot from the treadle and it will drop into place, making a perfectly tight joint.

Every part of this device is extremely simple and durable. There is nothing to get out of order or to cause the least trouble. The lifting is done by a heavy wire running through the indicator rod, or pipe, from the turnhead to the foot treadle below. The downward turn of the distributing spout is made of cast iron so that by continual use it will not become battered and bent out of shape, as would be the case if made of sheet steel. The turnhead is ball-bearing and can be operated with ease by a small child. This system of spouting an elevator is, without a doubt, the most simple, economical and effective ever devised.

The distributor is manufactured in four sizes, to wit, 6-, 8-, 10- and 12-inch.

The Union Iron Works, Decatur, Ill., are the designers and manufacturers of this distributor; and they will cheerfully furnish further information upon request.

[From the "American Miller."]

CONVEYOR MUST BE COVERED OR GUARDED.

There can be no question, the Supreme Court of Minnesota says, in *Woxland vs. Northwestern Consolidated Milling Co.*, 129 Northwestern Reporter, 856, but that the revolving screw in a conveyor box, a large steel appliance for transferring and moving grain from one part of an elevator to another, and moved by a powerful agency, is a dangerous piece of machinery, within the meaning of the Minnesota statutes requiring such machinery, when practicable, to be covered or guarded, and, if located where workmen are likely to come in contact with it in the discharge of their duties, should be guarded and protected as required by law.

Nor can there be any serious question that its position in the elevator does, in fact, if uncovered, expose employes to the danger of injury therefrom, where, while it is elevated 8 feet above the floor, employes, particularly those charged with the duty of oiling the machinery, have frequent occasion to come into close proximity with it in the performance of their work, and their protection from injury, by stepping or falling into the conveyor through accident or inadvertence, requires that it be covered, there being no contention that it is impracticable to do so.

The evidence in this case was conclusive that the conveyor was not completely covered at the time in question. At one end thereof, and near a point where an employe was required to oil certain bearings of the machinery, part of the covering had not been replaced by those making the repairs in this department, leaving a hole sufficiently large to admit a person's foot, into which the employe stepped. The duty to guard and protect machinery of this kind is an absolute one, and is not discharged by the exercise of reasonable care, and the evidence in this case fully sustained the action of the trial court in submitting this feature of the case to the jury.

INEXPENSIVE PROTECTION FROM LIGHTNING.

As an immense amount of property is destroyed every year by lightning, a considerable part of which consists of grain elevators, Prof. Henry, of the U. S. Weather Bureau, has recently prepared a paper upon this subject which has been published as *Farmer's Bulletin No. 367*. It can, of course, be obtained from the Division of Publications, Dept. of Agriculture, Washington D. C., on request.

Prof. Henry shows how lightning rods that are "inexpensive yet effective" may be erected by anybody, and gives the following list of the necessary materials: Enough galvanized telegraph wire to serve for a rod; a pound of galvanized iron staples to hold the wire in place; a few connecting tees, and a pound of aluminum paint. While iron is not so good a conductor as copper, it is less likely to cause dangerous side flashes, and it also dissipates the energy of the lightning flash more effectively than is done by copper. Prof. Henry advises the use of a single No. 3 or 4 galvanized wire for lightning rods, but there is no doubt that a number of smaller wires twisted together make a more efficient rod, and one that any farmer can make.

The bulletin contains an instructive discussion of electricity, and explains what can be done to prevent buildings being struck by lightning. This latter matter, however, is one that should be kept in mind whenever a building is being constructed.

EXPORT SITUATION AT PHILADELPHIA.

The embargo against Philadelphia export inspection corn certificates has not been lifted by the Liverpool Corn Exchange, importers in Great Britain, while the question is pending, standing on their attempt of a year ago to force a settlement that shall be based on certificates guaranteeing weight and condition, similar to such as are now in force with Argentine ports and other countries of supply. In such cases it is customary, but not obliga-

tory, for the commercial body at the port from which the grain was shipped to make reimbursement in case the cargo arrives in bad shape.

However, in spite of the embargo, corn is going out of Philadelphia, and in August about 2,000,000 bushels of corn were shipped to Liverpool, London and the Continent, to say nothing of wheat.

Meantime the grading rules are being revised, and Inspector Foering has put in a moisture tester for the inspection of corn. The inspection fee has also been raised to 30c per 1,000 bushels into vessel.

E. G. CURRY.

A large cash grain firm on the Chicago Board of Trade must, from necessity, today have grain elevators at various points of distribution. These elevators must be managed by capable men—by men of experience; for no matter what the energy and success of the parent house may be, it must have the co-operation of able lieutenants in the field.

Rosenbaum Brothers, of Chicago, Ill., one of the largest cash grain houses in this market, has ele-



E. G. CURRY.

vators in the Southwest, West and East; and we furnish a likeness and sketch of one of their most capable elevator operators, E. G. Curry, superintendent of the elevator at Sandusky, Ohio.

Mr. Curry was born in Philadelphia, Jefferson Co., N. Y., in 1866. His parents moved from that place to Canada, where he spent his early life and made his first business venture with Gilmore & Co., in the lumber business.

In the year 1890 he came to Chicago, Ill., and started to work for George A. Seaverns at his Mabbott Elevator. He weighed there for four years; then had charge of the elevator for several years; and at different times ran the Alton Elevator, Columbia Elevator, and the elevator at Davenport, Iowa. He also looked after grain and the inspection of grain at several of the larger markets, such as St. Louis, Kansas City, St. Joseph and Buffalo, and also bought grain for Seaverns of the country dealers.

He remained with Seaverns for fourteen years, or until the firm went out of business. Mr. Curry then engaged with Rosenbaum Brothers, and has been with them practically ever since. He served them in various capacities and at different markets until he was stationed some time ago permanently at Sandusky.

As shown by the above brief account of his movements, he has had a wide experience in grain elevator work, such as handling, loading and forwarding. He is known as an industrious and com-

petent man; and backed by a house with the reputation of Rosenbaum Brothers, he is helping forward to a noteworthy success the Sandusky end of the business.

[Official Announcement.]

THE GRAIN DEALERS' NATIONAL ASSOCIATION CONVENTION.

BY CHARLES QUINN.

Assistant to the Secretary.

Arrangements for the convention of the Grain Dealers' National Association to be held at Omaha, Nebr., on October 9, 10 and 11 next, are nearing completion rapidly. Final details connected with the special train which is to be run by the Chicago & North Western Railroad from Chicago to Omaha have been perfected with the North Western officials who are to give the grain men one of the finest and best equipped trains that has ever pulled out of Chicago.

The train will consist of luxurious Pullman drawing room sleeping cars, Pullman observation sleeping cars, free reclining chair cars, buffet and a *la carte* dining car service.

The special will leave the new North Western depot, Chicago, on Sunday evening, October 9, at 6 o'clock, arriving at Omaha on Monday at 8 o'clock. Returning the train will depart from Omaha at 6 p. m. on Wednesday, October 11, arriving at Chicago at 8 o'clock on Thursday morning. There will be dining car service out of Chicago and into Omaha on the outward trip and out of Omaha and into Chicago on the return journey.

The route from Chicago to the convention city lies through numerous beautiful suburban towns, thence on through the cities of DeKalb, Dixon, Sterling, Ill., Cedar Rapids, Marshalltown and other thriving towns of Iowa. At Clinton the Mississippi River is crossed. The Missouri River is crossed at Council Bluffs, and then the delegates are landed at their destination. As the journey both going and returning will be made at night, the grain men will not be tired out by a long, tiresome daylight ride, but will have from 6 p. m. until bed time to visit and renew acquaintances.

The North Western officials are printing a special menu card, artistically arranged, for the grain men. A photographer will also be at the depot at Chicago to photograph the delegates just before the departure of the train.

Already the grain dealers who are going to the convention have begun to apply to the North Western officials for sleeping car reservations. All such applications should be addressed to H. A. Gross, general agent passenger department, C. & N. W. Ry., 148 Clark street, Chicago, Ill.

CONVENTION PROGRAM.

The program for the convention will receive its final touches in a few days. Several speakers of national reputation are now arranging to address the delegates. Their names, however, must be withheld until final negotiations are completed. The following is a tentative program just prepared:

MONDAY—MORNING SESSION, 9:30 O'CLOCK.

Invocation—Rev. Thomas J. Mackay, pastor of All Saints Episcopal Church, Omaha.

Address of Welcome on behalf of the city of Omaha—Hon. James C. Dahlman, mayor of Omaha.

Address of Welcome on behalf of the Omaha Grain Exchange—Mr. N. B. Updike, president.

President's address—E. M. Wayne, Delavan, Ill.

Report of Executive Committee—J. W. McCord, chairman, Columbus, Ohio.

Secretary-Treasurer's Report—John F. Courcier, Toledo, Ohio.

Appointment of committees.

Afternoon Session, 2:30 O'CLOCK.

Report of Committee on Membership—Chas. Rockwell, chairman, Mount Vernon, N. Y.

Report of Committee on Arbitration—Adolph Gerstenberg, chairman, Chicago, Ill.

TUESDAY—MORNING SESSION, 9:30 O'CLOCK.

Report of Committee on Telephone and Telegraph—Edward Beatty, chairman, New York, N. Y.

Report of Committee on Legislation—A. E. Reynolds, chairman, Crawfordsville, Ind.

Report of Committee on Crop Reports—Fred. Mayr, chairman, Toledo, Ohio.

Report of Committee on Trade Rules—H. E. Halliday, chairman, Cairo, Ill.

Afternoon Session, 2:30 O'CLOCK.

Report of Committee on Natural Shrinkage—W. M. Bell, chairman, Milwaukee, Wis.

Report of Committee on Bill of Lading—Charles England, chairman, Baltimore, Md.

Report of Committee on Uniform Grades—John M. Dennis, chairman, Baltimore, Md.

WEDNESDAY—MORNING SESSION, 9:30 O'CLOCK.

Report of Committee on Publication of Arbitration Decisions—H. S. Grimes, chairman, Portsmouth, Ohio.

Report of Committee on Transportation—A. G. Tyng, chairman, Peoria, Ill.

Report of Committee on Demurrage—Geo. D. Montelius, Piper City, Ill.

Report of Hay and Grain Joint Committee—P. E. Goodrich, chairman, Winchester, Ind.

Afternoon Session, 2:30 O'CLOCK.

Reports of special committees.

Unfinished business.

Election and installation of officers.

Adjournment.

AN INDIANA ELEVATOR.

The picture herewith of the elevator of the F. J. Townsley Elevator Co. of Emison, Ind., is really a rear view, as the railroad serving the house runs along the other side; but this view shows the premises as a whole much better than the other view could, and is selected for that reason. The elevator itself contains nine bins for small grain, giving room for 15,000 bushels, to which the crib room for ear corn adds 10,000 bushels more space. Connected with the elevator on the south side, the



PREMISES OF F. J. TOWNSLEY ELEVATOR CO., EMISON, IND.

crib has an 8-inch belt conveyor in the top for carrying corn from the lofter spout back into the crib and a drag chain conveyor in the bottom for moving corn to the sheller in the basement; so that no scooping is necessary either to fill or to empty the crib.

The picture shows the engine house in the left center background, being located ten feet from the nearest building. It has a 25-horsepower Fairbanks-Morse Gasoline Engine. The office and scale shed are shown on the extreme left of the picture and are behind the engine house, looking from the railroad. The scale is a 4-ton Fairbanks. The cob house of the elevator, in the right center foreground, can be used for small grain storage when necessary, by permitting wheat to run over riddles in the cleaner and down the cob spout into the cob house, which is large enough to hold 4,000 to 5,000 bushels easily. The small house next in front of the cob house in the picture is the dust house.

The plant, it will be seen, is very complete and practical. It was built for the Townsley Company in 1910 by Fred Friedline & Co. At this moment it is in first class condition, in complete repair and ready to handle the new crop almost ready to move.

On the whole the crop of small grain in Knox County is very good; some fields yielded less than last year, but generally speaking probably as many bushels will be thrashed this year as last; and the elevator owners look for a profitable crop year.

The average farm value of all field crops grown in 1910 in the United States was approximately \$15.47 an acre, as just estimated by the department of agriculture. This is a decrease of 99 cents from the previous year.

GRADING SEED WHEAT.

It is commonly supposed that grading seed wheat, selecting the larger kernels and rejecting the smaller, has a definite effect on yield and quality of the resulting crop. Investigations carried on by the Ohio Agricultural Experiment Station disprove this idea, at least so far as the size of seed wheat is concerned.

In 1903, seed wheat was run through a fanning mill and the wheat graded as follows: First grade, 61.5 pounds per bushel; second grade, 60.75 pounds per bushel; third grade, 57 pounds per bushel. The number of kernels per ounce in this seed wheat was, first grade, 672; second grade, 810 and third grade, 1,134.

These three grades have been continued from the original seed until the present time. The successive plantings have failed to show any connection between the size of the kernels of the seed and the resultant crop. The seven years' test in which the selection and grading of seed has been continuous, fails to show any appreciable advantage in rejecting the medium and small kernels of wheat which are sound. The use of the fanning mill is desirable because it removes weed seeds and badly shrunken or diseased kernels.

The Kansas Experiment station verifies the re-

sults of the Ohio experiments, but adds a fact of great importance. It was found that the densest kernels possessed the greatest power of germination. The selection of dense kernels, in the experiment reported, was made by the use of a wind-blast grader. The kernels were blown through a long tin tube into boxes.

The densest—that is, those heaviest in proportion to their size—fell into the box nearest the tube, and were graded as No. 1; those in the sixth box, farthest away from the tube, were graded No. 6. When planted, kernels of No. 1 germinated an average per cent of 99.19, while those of No. 6 germinated an average of only 53.95. Between these extremes, the descent in germinating power of the kernels in the other boxes was remarkably regular, according to distance from the tube.

GRAIN STORAGE IN IDAHO.

The Idaho State Grain Commission, which last September adopted a new set of rules governing the charges of warehouse companies for the handling and storage of grain, imposed a condition that many farmers say is working to their disadvantage; and the matter has been called to the attention of D. W. Greenburg of Lewiston, chairman of the board.

Prior to establishing the new rules the warehouse companies' charge for handling grain was 75 cents per ton, which included storage until the first of January following delivery, with 10 cents per ton per month or fraction thereafter; but rule seven of the Commission's regulations provides a charge of 75 cents per ton, including storage for 90 days, after which the additional storage fee of 10 cents

per month is collected, which means that the farmer who holds his grain until January 1 is compelled to pay from 10 to 15 cents per month more storage than he was required to pay under the old system of free storage until the first of the year, as delivery begins in north Idaho about August 1 and is practically completed by September 15.

THE NEW COLORADO CEREAL.

The "American Miller" is enabled through the courtesy of M. A. Carleton, Cerealist of the U. S. Department of Agriculture, and David Fairchild, Agricultural Explorer, to present some additional facts in regard to the so-called new Colorado Cereal, introduced from the Andes region of South America.

It is not a cereal at all, properly speaking, but a plant belonging to the sugar-beet family, known botanically as *Chenopodium quinoa*. In Bolivia it grows only at high altitudes and probably would not grow in this country except under certain conditions. Mr. Fairchild encloses us a copy of a letter from Lieut. W. E. Saffard, U. S. N., written many years ago from Umutira, Bolivia, describing the preparation of food from quinoa. This letter in part is as follows:

The young woman is preparing the evening meal. We are to have mush and quinoa. I watch her work with great interest. It is easy to imagine myself among the ancient Incas. All of the cooking utensils are of pottery, almost identical in shape with articles we have already dug up from ancient graves. The young woman is now carefully cleaning a jar full of quinoa seeds which she has thrashed out from dried bundles hanging from the rafters of the hut. The seeds have somewhat the general appearance of turnip seed, but the grains are larger. She has now heated an earthen jar over the fire. The stove is of clay. Into the hot jar she pours the dry seed, and stirs it with a rudely carved wooden spoon. In parching, the seed crackles like corn. Now she has taken it off the fire and is pouring it into an open, shallow earthenware dish, into which she jumps and tramples the hot, parched seed with her bare feet. In this way the husks are removed.

Now she takes the dish to a spot near the hut where there is a fresh breeze, and spreads upon the ground a piece of cloth. Upon this she pours the seed from as great a height as she can reach, the wind blowing away the dust as the quinoa falls. Now she returns to the house and washes the seed three or four times, after which she pours it into a jar of boiling water over the fire. This water she changes again and again, filling it from a second jar in which water is also kept boiling. Then she takes the quinoa off the fire and washes it a dozen times, rubbing it vigorously between her hands and changing the water repeatedly. This is done, my guide said, to remove the bitter taste from the grain. Finally, the seed is put once more upon the fire, where it is boiling vigorously.

Dinner is now ready, the mush which has potatoes boiled with it, is not bad. The quinoa is snowy white, with each little spiral embryo half uncoiled, showing its relationship to the chenopodiums. It tastes something like oatmeal, and is quite palatable.

CROP YEAR AT MINNEAPOLIS.

The crop year 1910 ended at Minneapolis on August 31, with a total of receipts from the crop of 1910 of 90,534,200 bushels of wheat against 101,751,650 bushels for crop of 1909. Other receipts were as follows:

	1910 crop.	1909 crop.
Corn	9,736,760	7,038,980
Oats	16,907,290	17,465,380
Barley	18,745,510	22,078,460
Rye	1,743,290	2,433,460
Flaxseed	5,638,800	9,238,080

The total of all receipts, crop of 1910, was 143,305,850 bushels; for crop of 1909, 160,406,010.

Everett E. Seaver, vice president and treasurer of the Moore-Seaver Grain Co. and a member of the Kansas City Board of Trade for six years, will leave the grain business and will become manager of the California Drug & Chemical Co., at Los Angeles, Cal.

Shippers buying No. 2 red wheat from farmers ought not to base the price on the closing price of No. 2 red in elevators at market centers. They should buy on basis of what they are bid track market centers or their track, otherwise they will be paying too much. Owing to the scarcity of elevator room most bids are based upon the price at seaboard and not what No. 2 red or September closes at.—J. F. Zahm & Co.

[For the "American Elevator and Grain Trade."]
THE GRAIN ON THE TRACK.

BY GUIDO D. JANES.

Three hours before the midnight express passed through Ducktown, Alias Brady and Peter Kardinel sauntered into the village. Both were laughing, which laugh echoed against Bill Hodges' grain elevator. As it did so Pete halted his companion. "Got a scheme," he said not much above a whisper. "What is it?"

"To rob the express. I understand it carries \$50,000 in gold tonight; and if we can obtain it,



RAN INTO IT WITH BOTH FEET.

we can retire from the stealing vocation and live happy ever after."

Alias thought a moment, then he spoke up: "But how will we go about it?"

"Nothing easier. See [pointing to the elevator]; we will manipulate the flexible spout and pour grain on the main track instead of into a grain car and wreck the midnight express. The blame will fall on Bill Hodges because the grain will be from his establishment. While the cries of the dying are going on, we will confiscate the \$50,000."

Alias was a bigoted cuss, with a strong lower jaw and other things about his person to match. He seldom if ever adopted new or novel departures in burglary; but this idea about the grain and shifting the responsibility to the owner of the elevator appealed to him. So he dropped into his companion's way of thinking right off.

Sneaking over to the elevator, they broke in and very soon succeeded in pouring wheat on the main track, which paralleled the elevator, to a depth of five feet. When the job was completed, the two rogues surveyed their work through the semi-darkness with much pride. "Now let's pull out of here before we are caught," said Pete. "We can loaf around 'Last Chance Saloon' till we hear the midnight express get turned into kindling wood. Then will be our chance to obtain the \$50,000."

"Sure," returned the companion joyfully. "I want to prepare myself to accept the responsibilities of a rich man so that no one will think me a got-rich-quick individual. Come along." The two robbers then pulled out and disappeared behind a box-car down at the lower corner of the elevator.

Just about that time Hodges sauntered by, walking on the track, as was his usual custom going and coming from his elevator. He had left a plug of tobacco in his office desk and was returning for it, and while he did not meet the two robbers, he met their deed by running into it with both feet, which stopped him. Naturally it made him cuss, in the course of which his whole repertoire of bad expressions was brought into play.

In the midst of his shortcomings, however, he remembered that it was nearly time for the midnight express to saunter by and a probable catastrophe

to happen; and without wasting any further time, he hurried into the elevator and going to the motor turned on the switch. After the said motor was started in motion, he then repaired to the power shovel and rushing out with it to the pile of grain, he began to shovel it off the track. He did it with diligence and dispatch. Before the job was complete, though, the train in question whistled for the crossing below town. This naturally made Bill sweat blood, which he did in the twinkling of an eye.

This was just the thing; for it spurred him on to greater activity, and he scraped the last bit of wheat off just as the train hurried by, giving the hero barely time to side-step and avoid being run over and badly bruised. "Thank goodness," he remarked proudly, as the din and noise quieted a little. "I saved the train. Now, I will tell of my good deed to the general freight agent, and he will reward me by relieving my car shortage trouble. I am the luckiest dog in the country. If there are—"

He did not conclude his remark, for just then Pete and Alias broke out of the darkness and into the remark. They were cross. Pete with much feeling addressed the train saver. "You fool. We was going to rob de train what come along just now. We took yer grain to wreck the train. Now you spoiled de game, you—"

At this point Bill became quite rude and mannerless by poking into the robbers' faces a couple of cocked revolvers. "Throw up your hands or I will shoot," he remarked menacingly.

"Sure," returned both, complying with the request.

"Now," demanded Bill, "pay me for the grain you wasted. Wheat is a dollar a bushel, there are twenty-five bushels on the ground."

"Pete reluctantly thrust one hand into his hip pocket and pulled forth a wad of bills. "Take out your amount and return the remainder," he said.

"All right," from Bill.

The money was drawn out of the wad of bills and the rest returned to the robber, after which, there being no further business before the meeting, the latter was adjourned *sine die* by two of the meters turning on their heels and beating a hasty retreat up the railroad.

"Well," laughed the elevator man, "I guess I deserve a Carnegie medal for doing this stunt. But, after all, it ought to go to tobacco. If it had not been for homely tobacco I should not have done it. Hurrah for eatin' tobacco."

INDIAN WHEAT CROP.

India's great cereal crops are rice, millet and wheat, the acreage importance being in the order named, the wheat yield being (estimated for current crop at) 369,632,000 bushels. The wheat area is all of northern India south to the Ganges delta and a greater part of the central plateau above the Ghats. The varieties are white (both soft and hard) and red (both soft and hard), the north producing the soft varieties and the south the hard. The white wheats, soft and hard, constitute the major part of the exports, while those most affected at home are the Punjab reds.

Outside of the Punjab, however, the Indians do not eat much wheat, the cereal being mainly for export; and, barring climatic conditions, the size of the crop depends largely on the state of the European demand. Wheat is also, in a measure, the "governor," or regulator, of the home food supply; since if other supplies of food prove inadequate, the exportation of wheat can be stopped and the shortage of rice, say, made up in that way. Having said this, it seems like a paradox to further say, on the authority of Vice-Con-Gen. Perry at Calcutta, that about 85 per cent of the whole wheat yield of India is habitually consumed at home.

Taking a five year average, says Vice-Con-Gen. Perry, 1903-1908, the value of the wheat exported from India represented 32.9 per cent of the exports of all food grains and 6.6 per cent of the total value of Indian merchandise exported. The wheat exports of any statistical year are mainly drawn from the

crop of the previous year. This is explained by the fact that the seed is ordinarily sown in October and ripens in three and one-half to four months, and a large share of it is thus put on the market after the close of the statistical year, March 31. The following table shows the outturn in tons and the exports by quantity and value for the past seven years:

Harvest year.	Production. Tons.	Exports. Tons.	Percentage of exports to outturn.
1903.....	7,971,446	1,295,565	16.2
1904.....	9,641,145	2,150,025	22.3
1905.....	7,582,040	937,523	12.4
1906.....	8,579,140	801,445	9.3
1907.....	8,491,700	880,459	10.7
1908.....	6,106,700	109,757	1.8
1909.....	7,597,500	1,050,574	13.8
1910.....	9,557,000	1,266,151	..

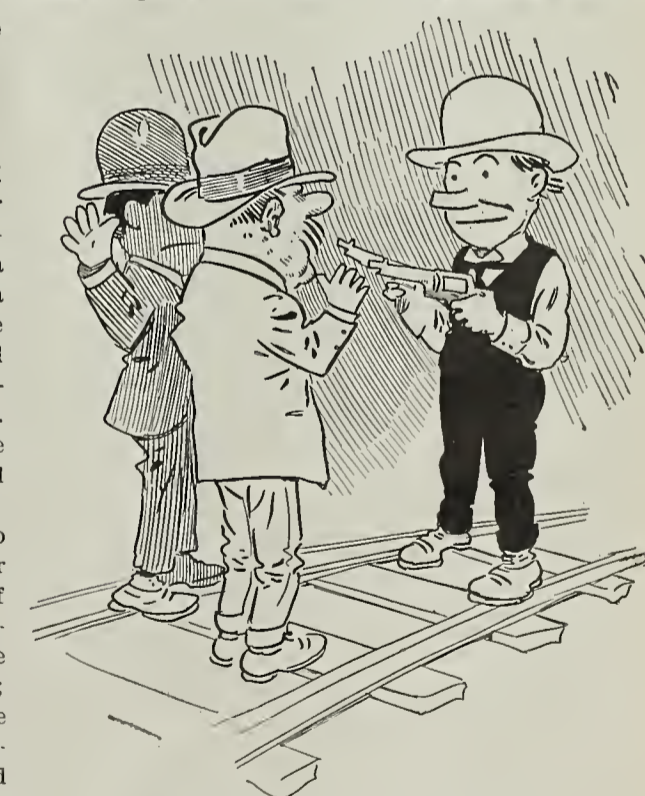
RECIPROCITY DISCOUNTED?

The fear of a trade fatality through the effect of the reciprocity agreement would seem to be rather remote when uncertainty already obtains as to whether that fatality has or has not already happened.

"At present level of domestic prices effect of reciprocity as a depressive price factor has been well discounted," says Minneapolis Record. "Chicago is on an export level with Liverpool, and Winnipeg relative to this American market in selling at a big premium. Northwestern markets are higher, but from a sectional condition, a short crop and one that shows a lack of quality. Difference now between Winnipeg and Minneapolis is not near a shipping basis. Should the markets narrow to an import point, a development not likely to be as easily consummated as some are led to believe, the volume has, undoubtedly, been anticipated as much larger than it is likely to prove. It would not mean a full diversion of the grain trend in this direction by any means, but should act as a regulator to maintain a normal price difference between spring wheat and winter wheat markets, which would prove of incalculable value to the milling interests of the Northwest."

The Johnson-Olson Grain Co. of Minneapolis, have just been awarded a large part of the contract for supplying the U. S. Government with forage for Fort Snelling for the year. The contract call for the delivery of 1,600,000 lbs. of oats and 240 tons of bran and straw.

The Division of Economic Zoology, of the Pennsylvania State Department of Agriculture, has received reports from various points in the Susque-



"THROW UP YOUR HANDS."

hanna Valley of the presence of the chinch bug, a destructive pest that works havoc in corn and grain fields. Owing to the rapid propagation of the chinch bug, State Economic Zoologist Surface recommends spraying with a 10 per cent solution of kerosene as a sure cure. Fields that have been attacked should be thoroughly sprayed and all the rubbish burned.

[For the Ohio Grain Dealers' Ass'n.]

WORK OF THE NATIONAL ASSOCIATION.

BY JOHN F. COURCIER.

Of all the organizations that have ever been founded for the mutual benefit of men engaged in business, the Grain Dealers' National Association would seem to be the most permanent, the most stable and the most needed. It has an economic basis as sound as granite; a sphere as broad as human welfare. Organizations may come and they may go, but the Grain Dealers' National Association like the eternal brook, will go on forever or, at least, as long as the human race cultivates the fields and uses grains for a diet.

We are living in an age of organization, of co-operation, of mutual helpfulness, of human brotherhood. Everywhere you look you see men getting together, because they are growing more civilized and are casting off their jungle habits. They have learned the lesson that greed and injustice and cruelty don't pay—that the reaction on the man who practices them far outweighs the temporary financial gain; and that to obtain some measure of happiness from life we must treat our competitor as a brother with the same aspirations, the same longings, the same hopes as ourselves.

Man is naturally a social animal. His instincts are all toward association. He would rather love than hate; rather do good than ill; rather be kind than cruel; rather do justice than injustice to his fellow man who is his competitor.

The Grain Dealers' National Association is a great Democracy, a Brotherhood. No grain dealer in the United States is too big for it and none is too small. The voice of the least carries the same weight in its deliberations as the voice of the richest and most powerful. The association could not endure were this not the case. No man with an axe to grind is wanted in the association. You cannot get even with any one through its agency. It was organized to teach love and not hate, harmony and not discord, co-operation and not strife, honesty and not dishonesty.

The Grain Dealers' National Association was organized fifteen years ago by grain dealers who had come to a realization of the fact that discriminations in weights and grades and railroad transportation facilities were gradually increasing the hazards of the business to an extent that rendered the interstate handling of grain unprofitable and undesirable. The fact that every charter member of the Association who is still living and in the grain business is now a member of the Grain Dealers' National Association, is, I think, ample evidence of the worth of the Association during its lifetime.

The president of the Association is elected at the annual conventions and has the executive direction of the Association during the year. Inasmuch as there are no proxies permitted, the president must necessarily be the choice of those members of the Association who take sufficient interest in the Association and the work it is doing to leave their affairs at home and attend the annual conventions. The absence of proxies also guarantees the Association against the domination of some ambitious individual who otherwise could secure proxies and control the election of the officers. The first and second vice-presidents perform functions which usually pertain to those offices.

The secretary is selected by the board of directors and has for his guidance the standing resolutions and other established policies as fixed by the members at the regular annual conventions and by the board of directors between meetings. The present incumbent construes his duties strictly within the lines of conservative practice. He confines his activities exclusively to the promulgation of the fixed policies of the Association. This guarantees the members that no action prejudicial to the interests of the trade can be taken up and fostered in furtherance of the individual ideas of the secretary unsupported by the officers and members of the Association.

The board of directors are elected at the annual conventions and are selected to represent the different sections of the country. They have legislative supervision of the welfare of the members of the Association during the year and constitute the highest tribunal in the arbitration of differences between members.

The executive committee, is, as its name indicates, purely executive in character and stands ready to advise with the officers of the Association in questions of fine discrimination as to the interpretation of policies and legislative orders.

The committee on arbitration is one of the most, if, indeed, not the most, important committee of the National Association. The committee is appointed by the president, who, in the natural order of things, being jealous of the welfare of the organization, will be constrained to take unusual pains in selecting members to serve on this important committee. Grain dealers chosen for this committee usually

are men who are known to be eminently fair in their own dealings and in the conduct of their businesses, and men who are held in high esteem by their fellows. When their names are mentioned, it is common to hear it said: "Ah, there is a good man. His firm is one of the best in the country. We never have trouble with them." With a committee so selected in the first instance, we have men of unusually strong characters and capabilities. Added to this we have the human tendency which impels one to do better those things which he does for others than those things which he does for himself. Even though a man in his own business may be inclined to compromise differences in order to get them adjusted, it does not follow that that same disposition would be permitted to obtain in the adjustment of the differences of others. While the supply of the milk of human kindness might not be any less in evidence when handling the cases of others than it would be when one were handling cases of his own, yet the realization that his decision, or opinion, would have to pass the scrutiny of several thousand grain dealers would militate against yielding to tender impulses and would pre-empt him to hew straight to the line, regardless of where the chips might fall—regardless of whether friends or business associates might be directly or indirectly affected.

The method of procedure is a thing that should be spoken of in order that members may know something of their duties and of the rights of others. Arbitration, under the rules, is compulsory. When a member wishes to arbitrate a difference, he notifies the secretary, who sends him a contract for signature and acknowledgment. The contract is filled in, setting forth the cause of action, acknowledged, and returned to the secretary, accompanied by a check for \$10 to cover his arbitration deposit fee. This deposit fee is returnable in the discretion of the committee on arbitration. Upon receipt of the contract, signed and acknowledged by the plaintiff, it is sent to the defendant, who signs, acknowledges, and returns it to the Secretary with his arbitration deposit fee of \$10. Upon receipt of the contract duly signed and acknowledged, the plaintiff is instructed to prepare his complaint in duplicate. Upon receipt of the plaintiff's papers, the secretary holds the originals in his office and sends the duplicate set to the defendant for answer. The defendant prepares his answer in duplicate and sends it to the secretary, who files the originals and sends the duplicates to the plaintiff for rebuttal. The filing of the rebuttal completes the preparation of the papers; and the original papers are sent to the chairman of the committee on arbitration. Under the rules, the committee may try a case, first, by passing the papers from one to the other; secondly, by personal hearing, and, thirdly, by calling the committee together at the expense of the Association to consider cases which could not otherwise be decided.

Unlike a great many arbitration committees, the national committee prepares a written opinion setting forth the claims of the plaintiff, answer of the defendant, the award, and the reasons for the conclusion reached. These decisions are printed and sent to all members, to the end not only that the members directly at interest are served but also that the entire membership may receive the benefit of the solution of the difference.

Either party to the arbitration may appeal from the decision of the committee on arbitration to the board of directors, who may either affirm or remand the case for re-hearing. It is sometimes suggested that the manner of selecting the committee on arbitration might conduce to a biased opinion in favor of certain localities, especially those localities most nearly contiguous to the territories in which the several arbitrators are located. Even though there should be a tendency on the part of the committee to show preference in that regard, the error is possible of correction on appeal to the board of directors, which is composed of grain dealers representing sixteen different sections of the grain handling community so divided as to maintain a geographical balance. It is our opinion, and I think you are in agreement with us, that after a trade difference has passed the scrutiny of nineteen officers and directors, the resultant decision would be as sound as any decision that could be secured from any court in the land.

The penalty for refusing to arbitrate is expulsion. One may inquire what it would mean to be expelled from the Grain Dealers' National Association. The fact that the Association has had to expel only two members within the past five years very eloquently answers the question. Members object to arbitration, saying there is nothing to arbitrate; but the record is evidence of their unwillingness finally to hold themselves in open violation of the rules which they have obligated themselves to observe.

In order that the committee may not be over-run by numerous unimportant cases, there must be an arbitration deposit fee, which is merely nominal at \$10, but in order that even the most insignificant cases may receive consideration, the Association has provided a trade rules committee to whose members may be referred all questions, large or

small, whose status is either not great enough or not sufficiently definite in character to warrant their submission to the committee on arbitration.

A case in point would be a member who might not be quite certain as to how he should proceed in adjustment, and he would lay the matter before the trade rules committee. The opinion of the committee enables him to determine whether or not he is right, and to proceed accordingly. If he is wrong, he can settle promptly; and if right, he is able to point out the equities in the case according to the wording of the committee, and thus bring the other party to the difference to a better understanding of the case. Few cases passed upon by the committee on trade rules have ever reached the committee on arbitration. It is also within the province of this committee to suggest amendments to the Trade Rules and to propose new rules to cover new and changing conditions.

We have a hay and grain joint committee whose duty it is to confer with a similar committee from the National Hay Association on all matters of importance to the two trades.

Our committee on legislation is composed of very able men, who stand ready at all times to safeguard the interests of the grain trade before the state and National legislatures. We receive the Congressional Record at our office and scan it daily for notices of new bills and of the status of old bills. Copies are secured and sent to the legislative committee and to the committee having direct jurisdiction of the subject matter.

The first gun fired in the National Congress after the Supreme Court had decided that the Interstate Commerce Commission did not have authority to enforce its own rulings was fired by the Grain Dealers' National Association. Mr. Bacon of Milwaukee, known as the father of remedial railway legislation and a member of the Grain Dealers' National Association, is authority for this statement.

There has not been a year during the life of the Association in which its legislative committee has not been called upon to consider measures of interest, and it stands to the credit of the National Association that no legislation inimicable to the interests of the grain trade has ever passed the National Congress.

We have a committee on transportation which may go so far as to go in to Court, by and with the advice and consent of the board of directors, to protect the interests of the members. It is understood, of course, that only cases of the most vital importance would ever be advanced so far as to get into Court. The disposition of the transportation companies is to adjust differences more promptly than formerly.

The National Association has stood in the forefront in the matter of a uniform bill of lading. We have a very strong committee looking after that end of the Association's work. It was the evidence that was laid before the Interstate Commerce Commission by the Grain Dealers' National Association that was directly responsible for the indefinite postponement of the original 20 per cent uniform bill of lading. The officers of the Association showed that one-tenth of one per cent had been paying the common law losses, and it at once occurred to the Interstate Commerce Commission that if one-tenth of one per cent had been paying a loss which the 20 per cent was designed to cover, what was the need of adding 20 per cent to the rate to take care of that hazard? Upon the presentation of this evidence, the hearing was postponed, and, as is well known, the proposition has never been reintroduced by the railroads.

The National Association has taken a very active part in the work of preparing uniform demurrage rules and was represented by its secretary at the hearing before a special committee of the National Association of Railroad and Warehouse Commissioners, held at Washington in 1908, to consider the rules which had been drafted by that committee for amendment and correction in pursuance of their submission to the National Association of Railroad and Warehouse Commissioners for final adoption.

As an evidence of how the National Association works in such matters, I submit the following: The secretary upon receipt of notice that the hearing had been granted wired the secretary of the commission for six hundred copies for distribution among that many grain dealers. The copies were received at once and sent to the members with a circular letter requesting suggestions for such amendments as those at interest might think would be designed to improve the rules. The suggestions received were taken to Washington by the secretary; and a comparison will show that the rules finally adopted include a great deal of the exact phraseology proposed by the secretary. The secretary of the National Association was signally honored by being selected chairman of the Shippers' Conference composed of traffic managers of all the largest traffic bureaus and private traffic departments in the country. We speak of this as evidence of the prestige of the National Association and the activity of its officers in all those matters which really mean something.

The committee on natural shrinkage is defending the interests of the grain trade against the railroads

*An address by the author, Secretary of the Grain Dealers' National Association, before the Ohio Grain Dealers' Association at Cedar Point, O., on June 21, 1911.

in the endeavor of the latter arbitrarily to fix a discount on all claims to cover what they are pleased to call natural shrinkage. That there is a natural shrinkage there is no denying, but that it exceeds one-tenth of one per cent is doubtful in the minds of those who have any great familiarity with the subject. There is another thing which should universally be corrected, and that is the arbitrary deduction of any given number of pounds from the invoiced weight of parcels of grain. It is the custom of some elevators to set the scales at 59,900 pounds and to issue a certificate for 60,000 pounds, confiscating the 100 pounds to take care of the elevator shrinkage. This practice is not thought to be fair. The elevator shrinkage should be included in the elevator charge and should be placed in a special fund to make up the loss resulting from the natural loss in weight.

We now have a compilation of arbitration decisions in preparation for publication for distribution among our members. These decisions and the special phases discussed will be very comprehensively indexed, to the end that when controversies arise, members may turn to their book of decisions and find out just where they stand, based on established uses as laid down in the decisions of the committee on arbitration.

We have a committee on telephone and telegraph whose duty it is to safeguard the interests of the members of the Association in the matter of telephone and telegraph service. The chairman of the committee, Mr. Edward Beatty, of New York, is the father of the idea of intelligent and definite transmission covered by the Beattygram. By transmitting the time of filing, the Beattygram proposes to put all parties at interest on notice and to promote the prompt handling of messages. It frequently occurs that telegrams sent before the opening of the market are not received until after the opening. If the time of filing were shown in the body of the message, it would be possible for the recipient of the telegram to determine with a reasonable degree of accuracy upon what market and what conditions the propositions contained in the telegram were based. The universal use of the Beattygram would eliminate a great many losses now occurring for which there seems to be no remedy. Representative Cary of Wisconsin is the father of a bill requiring the telegraph companies to transmit the time of filing without charge. The chairman of our telephone and telegraph committee has been urging the managers of the telegraph companies to inaugurate the reforms upon their own motion.

We have a large and well informed committee on crop reports, whose duty it is to keep in touch with the agricultural departments of the state and Nation in the promotion of ideas designed to improve market reports. Changing the time of issuance of market reports from one o'clock to one thirty o'clock central time was due largely to the efforts of the Grain Dealers' National Association, through resolutions adopted at its annual conventions.

For more than a decade the Grain Dealers' National Association has been working on the proposition to institute uniformity in the grading of grain. With varying and more or less uncertain results, the preliminary investigations were conducted throughout a period of years until in June, 1906, the tenth annual convention instructed the secretary to call a Uniform Grade Congress. In pursuance of the order, the first Uniform Grade Congress met in the Directors' room of the Chicago Board of Trade, December 11th, 12th, and 13th, 1906. After a three days' session, a set of uniform rules for the grading of grain was recommended to the grain trade of the country for adoption. Upon announcement of the Rules, a great deal of enthusiasm was manifested. Some markets adopted the Rules at once; others did not. Objections were offered from unexpected quarters, until in the following June, the officers of the Grain Dealers' National Association found it necessary to call the second Uniform Grade Congress to determine whether or not there was to be uniformity in fact. At the second Uniform Grade Congress, practically all of the good work that was done at the first was undone, but the announcement of the outcome so thoroughly aroused those of the trade who were favorable to uniformity that at the next annual convention of the Grain Dealers' National Association, held in St. Louis, October 15th, 16th and 17th, 1908, the work of the second Uniform Grade Congress was ignored and the rules of the first Uniform Grade Congress with amendments, were reinstated. Again at the thirteenth annual convention, held in Indianapolis, in 1909, the Rules were so amended as to take care of all but five or six minor objections. Within a short time after adjournment of the thirteenth annual convention, the Rules of Grade adopted by the National Association were accepted by a large majority of the grain inspection departments of the United States.

Those who have been in charge of the promulgation of these rules have encountered some very strong and sometimes vicious opposition, but the reform is gaining ground daily and it is believed that the day is not far distant when uniformity

in fact as well as in name will obtain. A great deal has been said about the custom of selling certificates, and there are a great many very substantial grain handling houses who are still laboring under impression that on a sale, for instance, of Toledo weights and grades final, the submission of official papers releases the seller from further obligation as to grade. They confuse the application of the rule as applied under the old system of inspection and as applied under the more definite rules of grade now being promulgated. Formerly on a sale of 5,000 bushels of No. 2 White Corn, Toledo inspection, the furnishing of a certificate of inspection signed by the chief inspector of the Toledo market discharged the seller's obligation. Only, however, because the rules of grade were so indefinite that the re-affirmation of the grade by the inspector who first inspected it disposed of any controversy that might arise as to the grade of the grain involved. If, in a disposition of fairness, the receiver of the grain had prepared a good sample of the parcel and sent it to the shipper for inspection, it would have gone through the following process: The seller would take the sample to the inspector and the inspector, after looking it over, would say, "this is reasonably clean, reasonably dry, and reasonably free from other grains on this crop," and that would end it, for the very important reason that you had contracted to accept his judgment in the matter. Now, however, it is different. When you contract for grain, Toledo inspection, the inspector must inspect and certify under the Uniform Grade Rules which provide that No. 2 White Corn shall not contain more than 16% of moisture, 5% of cob rotten grain exclusive of bin burnt or mahogany and 2% of dirt and broken grains. Eliminating the matter of distance, that boggy which so many opponents of the proposition to institute uniformity in the grading of grain seem to think so important, the buyer proceeds to the car, not yet removed from the elevator track where loaded, and draws a sample. He finds that the grain contains 17% of moisture, 7% of cob rotten grain and 4% of dried and broken grains, and declines to accept it on contract. In this case he did not contract to accept the judgment of any one or a dozen inspectors, but he did contract for corn that would not contain more than 16% of moisture, 5% of cob rotten grains exclusive of bin burnt or mahogany and 2% of dirt and broken grains, and he, as well as the inspector is prepared with dependable devices to determine for himself beyond question, either as expert or layman, whether or not the qualities of the parcel of grain came within the requirements of the rule. It must be understood, of course, that the Grain Dealers' National Association, as an Association, cares nothing about what the percentages are. It makes no difference whether the rule of No. 2 corn admits 17 or 25% of moisture, the sole object of the Association being to determine the will of the trade and then strive to formulate a rule to cover it and bring about the universal observance of the rule.

Theodore Roosevelt, shortly before he retired from the Presidency, said in a public address on the modern tendency of co-operation: "The forces of truth and love and courage and honesty and generosity and sympathy are stronger today than ever before." He was right. The Grain Dealers' National Association has all of these forces in its foundation. In its arbitration feature alone it teaches all of the six precepts laid down by the former President. It takes courage, truth, love, honesty, sympathy and generosity to be a member of the Association and submit willingly to the findings of the arbitration committee; for men are proud, and in their disagreements with their fellow men they are under all circumstances right.

With such a solid rock as this upon which to build, why should not the Grain Dealers' National Association be the greatest organization of its kind in existence? With a permanency so great that only the complete disorganization of the whole social fabric can affect it, why should it not be a model organization? With such a foundation, with the very "staff of life" for its capstone, why shouldn't it have before it a wonderful career—one that will be an inspiration to other associations of business men?

Do you want something to believe in? Then believe in the Grain Dealers' National Association. Believe in yourself, in your own power, in your calling, in your Association, in the honesty of your competitor. The men who have given so much of their time and energy to the promotion of the work of this Association believe in it. They are not dead clay waiting for the hands of the sculptor to fashion them into the semblance of life. They are not things that must wait to be acted upon by other men. They are living souls who believe in a "force for good," and by acting in accordance with their longings and aspirations they affect other men. Believe that your own business will be benefited by co-operation with other men in the grain trade, and believe, too, that the dignity of your calling will be vastly raised by association with other men in the same business. The night-mare of unfair competition will vanish, and in its place will come

a feeling of respect and not suspicion. Some call this enthusiasm, but it makes no difference what you call it. In its last analysis it is simply the social instinct—the innate desire of men to go through life with as little friction as possible.

[By Request.]

THE USE AND ADVANTAGES OF MOISTURE TEST IN HANDLING GRAIN.

BY DR. J. W. T. DUVEL.*

Crop Technologist in Charge Grain Standardization.

It gives me much pleasure to address this convention, because I have found that the members of this Association are interested in the work we have been doing to improve the quality and condition of commercial corn in the United States. I say corn, because Illinois is king of the corn states, especially from a commercial point of view. Moreover, the greater part of our Grain Standardization investigations has been confined to this most important crop, special attention being given to the moisture content and its relation to quality, rate of deterioration, shrinkage, etc., and my remarks this morning will be treated primarily under four heads:

- (a) The moisture tester and its use.
- (b) Moisture content and grain values or discounts.
- (c) Moisture content of corn at various seasons of the year.
- (d) Moisture content of Illinois corn crop of 1910.

THE MOISTURE TESTER AND ITS USE.

The moisture tester is an important factor in the grading of grain, and a factor which undoubtedly has come into the grain business to stay. At present, practically all of the large consumers of grain in this country are buying corn on the basis of actual feeding or manufacturing value; i. e., with a knowledge of its moisture content, or on a dry matter basis; and the time is not far distant when the successful grain merchant, both at home and abroad, must buy in the same manner. The conditions must change materially from what they are at present, because the bulk of our corn crop goes to market in a wet, unsatisfactory condition—I might say, in an unmerchantable condition, resulting in millions of bushels of musty or hot and sour corn.

The details of the moisture tester and full instructions for making moisture determinations of corn and other grain are contained in Circular 72, Bureau of Plant Industry, U. S. Department of Agriculture, entitled, "A Moisture Tester for Grain and Other Substances and How to Use It;" however, it will not be out of place to call attention to some of the more important points that should be taken into consideration in making moisture determinations to secure accurate and reliable results. In making moisture determinations of corn, use 100 grams of whole kernels with 150 cubic centimeters of a good grade of engine oil. When the thermometer registers 190° C., the flame should be extinguished promptly. If the temperature is allowed to reach 195° or 200° before extinguishing the flame, the percentage of moisture shown in the graduate will be too high, the excess water resulting from the breaking down of the reserve food material contained in the corn. The thermometers should be accurate and of good quality, with a certificate accompanying each thermometer showing any variation which might exist at 170° and 190° C.

Another important factor is the adjustment of the thermometer in the flask, and this is one of the reasons for recommending the use of a glass flask, so that the operator can know definitely the position of the mercury bulb, which should have a length of approximately three-fourths of an inch, and should be immersed four-fifths in the oil. If the bulb of the thermometer is too near the bottom of the flask, the moisture reading will be too low, and if it is not immersed to a sufficient depth, the moisture reading will be too high.

The reading of the percentage of moisture should be made directly underneath the layer of oil, which is always on top of the water in the graduated measuring cylinder. It is also necessary that the graduates be well cleaned before using them in a test. Quite frequently operators have been found using graduates which contained from two-tenths to five-tenths of one per cent of water left over from a previous test. If careful attention is given to such details as have been indicated, and the operator is careful and honest, the results of the tests will be entirely reliable and accurate.

MOISTURE CONTENT AND GRAIN VALUES OR DISCOUNTS.

The relationship between moisture content and discounts is a question which has been widely discussed by grain receivers and shippers during the past year. It is generally conceded that the intrinsic value of high moisture corn is less than low moisture corn, but what the difference in price should be per bushel is a much mooted question, although there seems to be no good reason why such

*An address by the author, made at the Bloomington (annual) meeting of the Illinois Grain Dealers' Association on June 14, 1911.

matters should not be satisfactorily adjusted between buyer and seller, though some variation would naturally be expected depending on the supply and the demand of the particular grade in question. Corn with a high moisture content is subject to a heavy shrinkage, and likewise is much more likely to become hot and sour when stored in bulk, either in cars or elevator bins, and both of these factors must be taken into consideration in determining market values, unless the corn is intended for immediate consumption, in which case the factor of deterioration is of less importance.

Chart I shows the discounts which should apply and the value per bushel, calculated to a uniform dry matter basis, when shrinkage alone is taken into consideration, covering a range in moisture content from 22 per cent to 12 per cent, omitting entirely the law of supply and demand, the cost of drying, and the increased danger of deterioration of corn having a high moisture content.

CHART I.—MOISTURE CONTENT, SHRINKAGE AND VALUE PER BUSHEL.

Moisture content. Per cent.	Shrinkage as moisture content decreases. Per cent.	Corresponding values per bushel (discount 5/8c). Per cent.
22	1.17	48 3/4
21	1.27	49 3/4
20	2.50	50
19	3.70	50 5/8
18	4.88	51 1/4
17	6.02	51 5/8
16	7.14	52 1/2
15	8.24	53 1/8
14	9.30	53 3/4
13	10.34	54 3/8
12	11.36	55

You will note first that the shrinkage or loss in weight expressed in per cent exceeds the difference in the percentage of moisture. By way of illustration, corn containing 22 per cent of moisture will lose 25 per cent in weight, if it is dried so that the moisture content is reduced to 12 per cent. If the drying be continued until the moisture content is lowered from 22 per cent to 12 per cent, a difference in moisture content of 10 per cent, the actual loss in weight due alone to the liberation of water, would be 11.36 per cent, and these differences will, of course, vary, depending on the original moisture content of the corn.†

The third column in the chart shows the actual value per bushel of corn containing various percentages of moisture, ranging from 48 3/4c for 22 per cent corn to 55c for 12 per cent moisture corn, the discount in value per bushel being 5/8 of 1c for each one per cent increase in moisture, on the basis of the percentage of shrinkage shown in column 2.

The rate of discount or difference in value decreases gradually with the decrease in the price of corn, and likewise increases as the price of corn increases. If the price of 12 per cent moisture corn were reduced from 55c to 44c, the decrease in value for each 1 per cent increase in moisture would be 1/2c per bushel; while if the price of corn were increased to 66c the difference in value, due to the increase in moisture, would be 3/4c per bushel. The basis of calculation here given does not, of course, take into consideration the supply and demand of any given grade of corn; the increased danger of

THE YEAR.

The moisture content of corn, as marketed at various times of the year, depends very largely on the condition of the corn at time of harvesting, how the corn has been cared for on the farm, and the general atmospheric conditions at the time of marketing, as well as during the previous period of the corn's history.

Although the 1909 crop of Illinois corn contained less moisture during the fall and winter than the 1910 crop, the results of numerous tests of samples of the 1909 crop, marketed during the months from October to August, inclusive, will not be far from the average which might be expected for any crop

those interested are accepting reduced profits, because there is considerable shrinkage in such corn, both during transit and in storage. Corn containing such a high percentage of moisture cannot be handled commercially, unless for immediate consumption, without an appreciable deterioration, which not infrequently reaches a degree of hot, sour, and badly discolored corn.

Considering that the bulk of our corn crop is marketed by the end of April, it will not be altogether out of place to call attention to the high moisture content in a somewhat more striking manner. The corn crop of 1910 was more than three billion bushels, of which the state of Illinois pro-

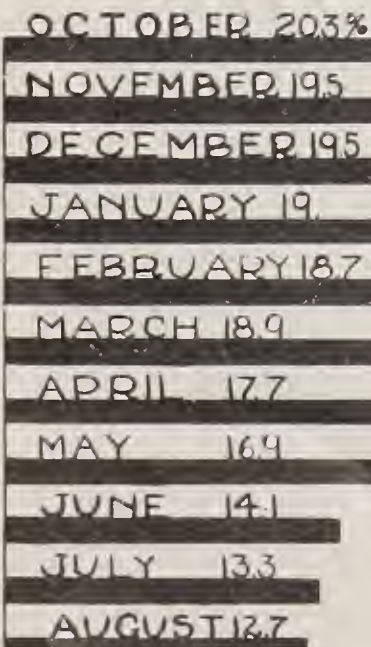
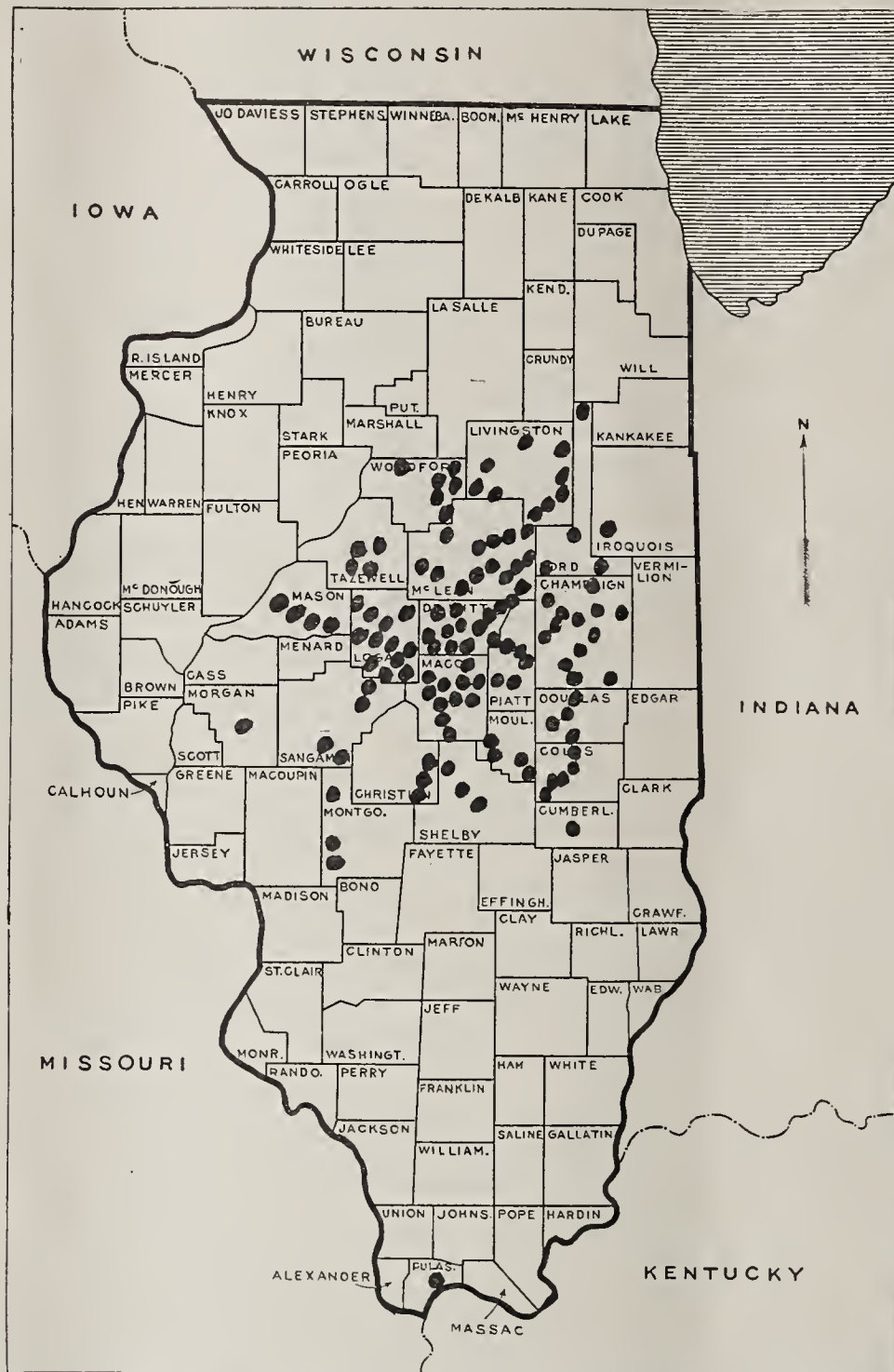


Chart 2.—Decrease in moisture content of Illinois corn from October to August—crop of 1909

deterioration in high moisture corn; the cost of drying, if drying be necessary, or the important fact that it is not sufficient in the artificial drying of corn to reduce the moisture content from 20 per cent to 19 per cent, simply to bring it within the grade, for the drying must be much more thoroughly done if the corn is expected to keep in storage.

MOISTURE CONTENT OF CORN AT VARIOUS SEASONS OF

†For full explanation, see Circular 32, B. P. I., U. S. Department of Agriculture—"Moisture Content and Shrinkage in Grain."

under existing conditions of harvesting and storing corn. The results of the tests by months are shown to the best advantage in Chart 2, which needs no special explanation other than to say that the corn in Illinois at present, owing to the dry and warm weather during May, contains less moisture than the corn did last year during the month of August, although the moisture content of the 1910 crop was much higher during the winter months.

MOISTURE CONTENT OF ILLINOIS CORN CROP, 1910.

In order to bring out more fully the value of the moisture test in the handling of commercial corn, I am going to show the results of such tests on 1,096 cars of Illinois corn, crop of 1910, shipped from 125 stations in 23 different counties, as shown on the accompanying map, to one of your more important markets during the months from November to April, inclusive. The average moisture content of the corn contained in these 1,096 cars, as shown by tests of representative samples, was slightly more than 20 per cent; to be exact, 20.04 per cent, a condition almost unbelievable, especially when it is considered that no "leaky roof," "sample," or "no grade" cars were included. The minimum moisture content of the corn from any of these cars was 15.3 per cent and the maximum was 22.5 per cent. However, only 27 cars showed a moisture content of 18 per cent or less and only 116 cars showed 19 per cent or less; yet many shippers probably felt that their shipments should have been given a higher grade than that which they received.

In handling such corn, it is practically certain that some one interested in the various transactions is handling the corn at a loss, or that all or part of

duced approximately 415 million bushels, or 13.3 per cent. Of the Illinois crop, 199,104,000 bushels, or 48 per cent of the total yield of the state, was shipped out of the county in which it was grown; so that the Illinois corn growers have the proud distinction of furnishing approximately 30 per cent of the entire corn of commerce in the United States. Assuming that 60 per cent of the Illinois corn which entered into commerce was marketed during the months from November to April inclusive, when the average moisture content was 20 per cent, and that good merchantable corn should not contain at most to exceed 15 per cent of water, you have a difference of 5 in the percentage of moisture, or by weight; excess water amounting to 5.88 per cent, an equivalent of more than seven million bushels. Allowing 1,000 bushels per car, it would require a train of cars 50 miles long to haul the excess water, for which the railroads receive a very welcome sum for transportation charges, and perhaps they likewise disburse a considerable sum in the payment of claims for shortage, due to shrinkage and deterioration in transit.

I have called attention to these facts in this rather striking manner, because it is evident from a commercial point of view that during the past decade the tendency has been to develop high yielding strains of corn at the sacrifice of good marketable condition. Just how much of this increased yield is due to an increase in the percentage of water contained in the corn at time of harvesting is impossible to determine; however, it is certain that much of the corn now grown requires too long a growing period, so that it does not mature in suf-

ficient time to dry out properly before cribbing or marketing.

This condition has been brought about primarily because corn containing a high percentage of moisture commands, as a rule, the same price per bushel of 56 pounds as good dry corn when delivered at country shipping points. As soon as the factor of moisture content is taken into consideration, and buyers of corn at country points pay prices commensurate with its intrinsic value, better and dryer corn will find its way into market. But so long as grain buyers at country elevators are content to pay corn prices for water, the large, late-maturing high-moisture types of corn will prevail, and the demand will be for lower standards of commercial grades, notwithstanding the fact that these standards are already too low.

RAILWAY ACCOMMODATIONS TO THE CONVENTION.

The Chicago and North Western Railway has been selected as the official route between Chicago and Omaha, Neb., in connection with the fifteenth annual convention of the Grain Dealers' National Association, and the special train which has been arranged for to take delegates, members and friends to the convention will be one of the finest and most completely equipped trains ever provided for a similar occasion.

The special train will leave Chicago 6:00 p. m. Sunday, October 8th, arriving Omaha 8:00 a. m. October 9th. Returning leave Omaha 6:00 p. m. Wednesday, October 11th, arriving Chicago 8:00 a. m. Thursday, October 12th.

Equipment of Grain Dealers' Special.—The equipment of the Grain Dealers' Special Train will include Pullman drawing room sleeping cars, composite buffet and library observation cars and North

River, on the west bank of which is located Clinton, Ia.

West from Clinton the trip across Iowa is through a quick succession of growing, progressive, aggressive western towns, surrounded by one of the banner grain and stock feeding districts of the West, where grain elevators mark shipping points, and, as far as the eye can see, fertile plains stretch in

been made and the Omaha Commercial Club and Omaha Exchange have co-operated to that end.

Headquarters.—The Hotel Rome has been selected as convention headquarters and it is suggested that reservations of accommodations be made direct and at the earliest possible moment. Mr. Miller, the proprietor, will be glad to furnish information and make room reservations. The hotel is provided with



NORTH WESTERN PASSENGER STATION AT CHICAGO.

every direction, bearing crops that have few equals or furnishing pasturage for sleek herds that are destined to supply the world's markets.

At Missouri Valley the line rounds the eastern bluffs and enters the broad valley of the Missouri River, through which it continues until Council Bluffs is reached.

Arriving at Council Bluffs, the traveler has reached one of the most important cities in the West, both from a commercial and historical point of view. Thence on across the great double track bridge to Omaha, the Convention City.

Omaha, Neb.—Omaha, the trans-Missouri metropolis and one of the great gateways to the West, is in

a splendid auditorium in which the convention will be held.

PORT IMPROVEMENT AT ODESSA.

The schemes for the improvement of the Russian port of Odessa and the construction of a grain harbor have not yet been officially sanctioned, but it is possible that the Duma, whose approval is necessary for the loan of \$8,000,000, may refuse the money on the ground that Odessa is already one of the best ports of Russia. That the better facilities for loading grain which are contemplated would



VIEW OF THE NORTH WESTERN'S TRACKS.

Western dining cars; meals *a la carte*. The train will be electric lighted throughout and every possible arrangement has been made for the comfort and convenience of those who use the special train to the convention. Special sleeping cars may be arranged for to start from cities east and south of Chicago should the volume of business from such cities justify. Arrangements for such special cars should be made with the local agent at initial point.

The Route.—One of the fairest regions in the world is that tributary to the double track automatic safety signal line of the Chicago & North Western Railway between Chicago on the east and

every respect a typical and progressive American city. It is beautifully situated on the bluffs and benchlands that border the river, and is the headquarters for some of the largest packing, smelting and jobbing industries in the United States. It serves as a distributing point for a large section of the western country, is an important army depot, and is growing rapidly in the way of extensive manufacturing interests.

The last census gives Omaha a population of approximately 130,000. It is a metropolitan city in every respect, with modern hotels, public buildings, a perfect school system, public parks and a 37-mile boulevard system.

As a commercial center, Omaha has established herself firmly among the leaders. It is said that Omaha ranks as the second corn market in the world; the third wheat market in the United States and the leading butter market of the world.

Omaha will give the grain men a royal welcome and visitors will know what western hospitality means after they have honored the city with a visit. Every citizen of the metropolis extends a hearty welcome to the grain men and will join in leaving nothing undone to impress upon them the importance of this "Gateway to the West."

Tickets.—Members and friends east, north and south of Chicago can purchase their tickets from their home agents via the route most convenient to Chicago, but be sure your tickets read over the Chicago and North Western Ry., Chicago to Omaha and return.

Rates.—Tickets via the Chicago and North Western Ry. will be sold daily Chicago to Omaha and return at rate of \$20. Final return limit thirty days.

It is desired that as many members of the Association and friends as possible will avail themselves of the splendid service which will be afforded by the Grain Dealers Special Train.

Many will reach Chicago on Sunday morning and the Hotel La Salle, Madison and La Salle streets, is suggested as a place to rendezvous.

The Convention.—That the fifteenth annual conventions of the Grain Dealers' National Association will be the most largely attended in the history of the organization is plainly manifest. Elaborate preparations for the comfort, convenience and entertainment of those attending the convention have

cause an enormous increase in the quantity dealt with at Odessa does not seem certain. It cannot do so without diverting grain from Nicolaiev, says the Corn Trade News, and much of the produce shipped is forced by circumstances to go to one port or the other. There is a debatable territory from which grain might be sent to either Odessa or Nicolaiev, and there will no doubt be a struggle between these ports to secure the grain carried on the Bakmatch Line, now approaching completion.

Up to August 10 there were issued by the North Dakota Railway Commission 225 elevator license permits. The period for which the licenses now being issued hold is from August 1, 1911, to July 31, 1913. The number to be issued in the state is approximately 2,000.

For the first time in nearly five years durum wheat sold in the Duluth market Sept. 5 at pre-



A NORTH WESTERN TRAIN.

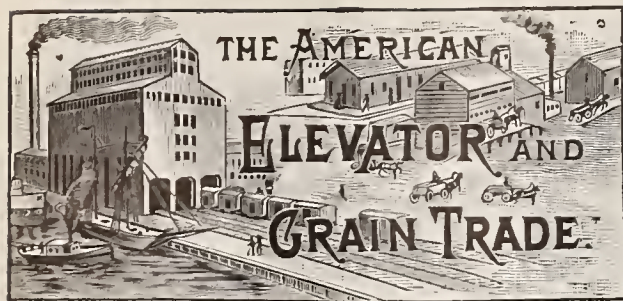
mium over No. 1 northern. For several years past Duluth traders have been advocating the growing of durum wheat, and Duluth has been one of the greatest durum wheat markets in the world, possibly the greatest. It has been held that where the farmer could get one bushel more of durum to the acre than he could of No. 1 northern it would pay him to grow durum. The millers have refused to buy the harder grain unless they could get it much cheaper than the No. 1 northern. Durum finds its big market for the manufacture of macaroni and certain cereals. The rise in price in the Duluth market September 5 came from the strong foreign news.—Record-Herald.



THE BRIDGE AT OMAHA.

the Missouri River at Council Bluffs and Omaha on the west. From an agricultural standpoint it has no superior. Here the finest stock is bred, the dairy farms are the equal of any and the grain crop furnishes sustenance for the world's millions.

Illinois farmers are prosperous, and along that portion of the line which reaches from Chicago to the Mississippi, the broad and fertile prairies of northern Illinois lay spread, where dairies and farmsteads vie in wealth with the products of magnificent manufacturing centers. Such centers are found at Geneva, De Kalb, Rochelle, Dixon and Sterling, around which cluster manufacturing interests whose various products bear an honored name not only at home but also abroad, thence on to the Missouri



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ADVERTISING.

This paper has a large circulation among the elevator men and grain dealers of the country, and is the best medium in the United States for reaching persons connected with this trade. Advertising rates made known upon applications.

CORRESPONDENCE.

We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

CHICAGO, SEPTEMBER 15, 1911.

Official Paper of the Grain Dealers' National Association
and of the Illinois Grain Dealers' Association.

THE SPEAKER EXUDES.

The exudations of Speaker Adkins, briefed in another column, are not here reprinted because they are of any consequence *per se*, or are likely to enlighten grain dealers, but because they are fairly characteristic of the intellectual pabulum that is always fed to farmers by politicians like the Speaker. Mr. Adkins is a receptive, if not an active, candidate for gubernatorial honors; and as such, he feels it his cue to talk buncombe to his fellow farmers rather than take the better part of appealing to their reason and letting the truth awaken their sense of good citizenship and their interest in the numerous reforms that may well engage the attention of Illinois voters. It may, therefore, suffice to say, speaking generally, there is no substantial truth in what he has said as to the relations of the Chicago Board of Trade and the farmers. That individual grain dealers may have, in the past, placed obstacles in the way of incipient co-operative companies, is altogether likely, seeing grain dealers are but human and some promoters of co-operative companies peculiarly venomous; but to talk seriously of a grain trust—and of all things a grain trust in central Illinois—is simply resorting to the stump methods of the blatherskite.

That Speaker Adkins was quite disingenuous is seen in his remarks on his "bill," which he calls one to "legalize co-operative organizations." That was not, in fact, we apprehend, Mr. Adkin's object at all; what he was aiming at, in spite of the constitutional prohibition of privilege and the attitude of the Supreme Court toward special privilege, was to obtain some legal advantage to be enjoyed by farmers' com-

panies but denied to all other co-operators who do business under and by virtue of the general incorporation act of this state, which has enabled many co-operating farmers to conduct their company grain business successfully and in good faith. No group of farmers who want to "co-operate," or enter into a joint stock company to conduct a grain business as other incorporated grain companies conduct their business, needs any greater or different privileges than the state law gives, and it does not appear that any considerable number of them have asked for any peculiar privileges for themselves alone. When, therefore, Speaker Adkins, or any one else, comes forward and asks the legislature for an incorporation law made for a class only, the public has the right to question his good faith, his good citizenship and his entire trustworthiness as a public man and legislator.

THE NATIONAL CONVENTION.

The provisional program of the Grain Dealers' National Association convention that appears on pages 138 and 139 seems to limit the attention of the delegates and accompanying members to the official reports only. These, given their proper consideration and debate, might well constitute three days' solid work; and it would be no serious loss to those attending, who are minded to confine their deliberations exclusively to the good of the Association, if no further topics were forced upon their attention. But the program makers, as the official announcement assures us, are not content thus to limit the agenda of the meeting; and although no name with national reverberation has been pronounced as the "speaker of the occasion," those who may be at Omaha may expect to face a great man, or more than one, who will have something to say worth going to Omaha to hear. And, then, although the official program does not mention the fact, there will be abundant recreation and entertainment as sauce to the more substantial features of the occasion. A town of 130,000, Omaha made a reputation as an entertainer in the past, when she was a city of lesser moment—to all except herself; and we may be sure she will be equal to this occasion, with something to spare.

The National Association has "arrived." As a trade machine, operating for betterments in many directions, the Association has demonstrated its *raison d'être*; but such institutions are not automatic in their action, except that when an efficient executive, such as this body fortunately possesses, is substantially supported by the money, sympathy and co-operation of the membership it is thereby relieved of the carking care that pertains to mere ways and means, and so is able, seemingly automatically, to make the Association influence and power as a trade representative felt at the very place at the very time when a "demonstration of force" is needed and when, among the membership in their business relations, its friendly offices are most beneficial to all concerned.

It is, therefore, the progressive man's duty to his business to attend these annual meetings, because they are the trade's annual congresses to make and confirm trade customs more potent than law, and which, carefully acted upon, are

really more useful and beneficial to trade and commerce in grain and grain products than all of the laws made by state legislators who know nothing of trade needs or customs and are too uninterested to learn.

FOREIGN DUTIES LOWERED?

It is quite certain now that the continent of Europe has been badly hit by the drought and that the demand for American feedstuffs at least will be extraordinarily heavy during the coming months. This fact has led to repeated rumors that both Germany and France will abolish, for the time being, their import duties on feeds and feed grains. That such a course would be a great relief to certain classes of consumers there is, of course, no doubt; but at the same time it must be remembered that Continental cabinets have hardly the arbitrary power in this respect exercised by the president of our neighboring Republic of Mexico, who regulates at will the action of the duty to meet conditions as he sees them. Moreover, European tariffs were made by the agrarian class, rather than by the industrial classes, so differentiated; and so long as the farmers have grain or fodder to sell, the non-farmer consumer will surely have to pay their price, which will include the duty. To be sure, if the Continental duties were lower, the American might expect to sell more corn there; but otherwise it can make but little difference to the American shipper whether Continental duties are remitted or not—he doesn't pay them.

COUNTY DEMONSTRATION FARMS.

The editor of this paper, remembering the summary, if not to him convincing, manner in which, a few years ago, was disposed of by the experts his proposal to utilize the asylum farms in Illinois as county "demonstration farms," was pleased to hear Prof. Holden's approval of it at Chicago recently, and surprised to note in Bul. 208, U. of Wis. Exp. Station, that of twenty-three demonstration farms in that state no less than twenty are located at county and state asylums and three at boys' and Indians' industrial schools. The objection was made to the proposal, that Illinois "county farms" are not typical or characteristic, which was not conclusive by any means; for it is likely that Illinois county farms are generally as typical as those of Wisconsin and like them located "along well traveled public highways where the operations conducted and the results secured can be seen by the farmer during the entire growing season as he drives to and from town."

The demonstration farm is the "object lesson" of the new agriculture movement; and as the farmer of the county farm is a public servant, we can see no valid reason why he should not be used for "demonstration" purposes, working him under instructions of experts, as the farmers of the admirable system of "demonstrations" in North Carolina are simply the owners working under the directions of the state experts.

Aside from the "demonstrations" carried on wholly by the Univ. of Ill. Exp. Station, the University influence might be measurably extended into more counties by placing directors over all the asylum farmers, at least as to some

of their operations; for these county farms, "because of their public nature and the interest which each farmer has in the public institutions of his county" would be peculiarly adapted to awaken interest in the results of the work under such direction. Let the word go out that, "They are doing some fancy farming at the asylum farm," and that farm would become the cynosure of every farmer and newspaper reporter in that county; and every step of the work would be made public to the minutest detail, whether the demonstration were a success or a failure, and it would be valuable in either event.

PANAMA CANAL.

Mr. Breed has formulated in a brief way the belief that the completion of the Panama Canal will have a great influence on the grain and flour trade of this country. The immediate effect of the opening of the canal will doubtless be the reduction of freight rates on Pacific Coast grain and flour to our Atlantic ports and to Europe, thus putting the grain products of the "Inland Empire" in competition with those of our West and Northwest in the East as they never have been in competition in the past.

Indeed, in this will consist, probably, the greatest influence of the canal on the world's business—the reduction of American trans-continental rates, ocean to ocean. The opening of the Suez Canal revolutionized the world's commerce in a way that can never be repeated; because the Panama Canal can now shorten no routes of such transcendent commercial moment as were shortened by the Suez Canal, which straightened latitudinal routes; whereas the Panama Canal, commercially speaking, shortens commercial routes to the west coast of South America only, where we find, relatively speaking, but poor countries, likely always to be so, compared with the vast wealth that lies on the latitudinal lines of the northern hemisphere. The most profitable commerce is that carried on between countries rich in resources and peopled by productive artisans, and these lie in the northern half of the world.

HAY INSPECTION.

The progress of proper inspection of hay—that is to say, uniform inspection—under the rules of the National Hay Association is slow, one might almost say discouragingly so; yet Mr. Wilkinson, in his address published in the July number, showed the commercial necessity of proper inspection, and President Dean's report of the success of such inspection at Cleveland is assurance that in general practice these rules, honestly construed, would prove in the long run a great benefit to the country at large, by forcing the farmer to better production and the unprincipled shipper and dealer into the straight and narrow way that leads to the square deal *nolens volens*; and with some men that is the only way they can be made to do business reputably.

Thus it obtains that the consumer—or the dealer who passes the stock to him—is he who must insist on this kind of inspection—National Inspection with honest construction of the rules. Shippers from the baling points to the forwarders are content with anything that

will enable them to "pass it on"—they are not concerned with what happens after the hay leaves their hands, except in the case of forwarders who hope to build up reputations as always reliable merchants. These, then, and the consumers, are they to whom the Association must look as the makers of the public opinion that shall put an Association hay inspector into every market where hay is assembled for consumption or for large forward delivery.

THE DISCOUNTS ON OFF-GRADES.

The opinion of Chairman Berry of the Warehouse Commission suggests, inferentially, at least, that the New York method of fixing discounts on off-grade corn might be applied at Chicago, and thus relieve the tension caused by what Illinois shippers think are the arbitrary discounts taken at Chicago. But Chairman Berry does not, if such is indeed his implication, take into account the different conditions obtaining in the two markets and the vastly different volumes of off-grade corn arriving in the two markets under normal conditions; so that a system that might lightly tax the time and patience of an adjusting committee in New York might be beyond all reason to expect of volunteers from the trade at Chicago.

But Illinois shippers, in considering these discounts so much complained of, labor under at least two misapprehensions: (1) that the discounts are arbitrary, and (2) that they are compulsory. The elevator interests have been rather lenient than arbitrary in their relations to this flood of off-grade corn, if the truth were known—Chicago men have no desire to drive trade away from the city; but when it comes to fixing the discounts, the market—that is, what the open market will pay for the stuff—fixes the discounts. There is no other way in which it can be done; and so, though by a different visible method, the discounts at New York are made exactly in the same way as at Chicago—by the test of the market.

In order, then, that he may get the full value of his grain, the shipper, if he is at any time apprehensive that he is not getting its full value, has only to direct the receiver, in the event of its not grading, to turn it over to a commission man for sale or order the receiver to sell it on the open market, and apply other grain on his contract. He can do this at any time before the grain has actually passed from his possession, unless he is peculiarly unfortunately circumstanced in the matter of filling his contracts, so that his own protection is absolutely in his own hands always.

But the protection of a grain shipper's interests on 'change requires watchfulness—gumption and that too of an acute sort; and one is not any too certain that all shippers are endowed with or utilize that fine business asset as they might by taking thought of the, to some, more occult details of their business.

LEAKING CARS AT MILWAUKEE.

Milwaukee is up against the leaking grain car—has been, no doubt, for a long time, but has recently had the leak nuisance so forced upon its grain committee that that body has directed Sec'y Plumb of the Chamber of Commerce to address the proposal to the railroad

companies doing business there that is reprinted on another page. It is, of course, the fair thing that the railroads should furnish the material for patching and plugging cripple cars; but if we remember rightly the Commerce Commission has made a ruling that controls railway action on this very matter, that is not entirely a satisfactory settlement of the problem; because the Commission is convinced that the "old man Adam" is so firmly fixed in the human nature of shippers that permission is withheld for shippers and carriers to settle this matter in a decent, orderly and equitable manner, on the theory that freedom of action would inevitably lead to a revival, under such permission used as a subterfuge, of that great *bête noir* of the trade, the forbidden rebate!

TERMINAL CONGESTION.

The congestion of grain in the great terminal markets of the country has not been measurably relieved as yet, although with corn down, as it now is, to an export basis, with a genuine need of large supplies of feed by continental Europe, there ought to be felt soon an outward movement that will bring some relief to the elevators. Until such a movement is more decidedly marked, than it now is, however, the country dealer who begins now to sell uncut and unhusked corn for winter delivery assuredly is taking long chances against the possible discounts next winter on off-grades. He can theorize *ad libitum* about what ought to be the discounts "on a fair basis"; but the market is no respecter of persons or theories: the buyer will pay only what pleases him—when the market is flooded.

ANTI-SEED INFECTION BILL.

There is now before the Congress, favorably reported to the House on January 6, and ready to be passed on the "unanimous consent calendar" on February 6 but for the objection of a single member, a bill (S. 2870, H. 12311) to enable the Department of Agriculture to quarantine imported "nursery stock" (which includes seeds), as a precaution against the further importation of such expensive pests as San José scale, the alfalfa leaf weevil, the Oriental cotton scale, the potato wart disease, etc., and to maintain quarantine stations to prevent, or, at least, impede, their general distribution in the movement of domestic nursery stock throughout this country in interstate commerce.

This bill has been drawn to suit the wishes of the most captious nursery man and perhaps has been weakened, compared with its original form, by leaving the inspection of stock to the several states instead of placing it in the hands of the federal Government; nevertheless the reasons for the enactment of a restrictive law are so urgent that immediate action on the bill should be demanded of Congress on its reassembling in December.

Those who may be ignorant of the tenor of the bill and the reasons calling for its speedy enactment may inform themselves by applying to the Department of Agriculture for Circular 37, entitled, "The Department of Agriculture in relation to a National law to prevent the importation of insect-infested or diseased plants."

EDITORIAL MENTION

You, sir, are due in Omaha on Monday morning, October 9, for three days.

Don't pay top prices for wet or smutty wheat and soggy corn and expect to deliver it for something better.

The Canadian wheat crop reports are very bearish; but the crop has not yet gone to market, and it is suspected that a not inconsiderable part of it will eventually be marketed in the form of dressed poultry, eggs, etc.

In those parts of the West still unaffected by alfalfa weevil, the yield of seed this season seems to have been generally very abundant; and as the price has not proportionally declined, the seed harvest has been a very profitable one.

With terminal elevators everywhere filled to repletion and no relief in sight, instead of selling everything in sight and not in sight for early winter delivery, why don't country elevator men play the game to make their plants earn some carrying charges?

A New York paper speaks feelingly of a certain Chicagoan who was "ruined in the wheat pit" several years ago; since when he has been too poor to do anything but travel around the world. A good many traders who never were "ruined" will hardly feel like pitying him.

A Wichita "business man" thinks there ought to be a law providing for the summary punishment of "every fellow who rides through our country on trains and then raises a howl about 'crop destruction'"—in Kansas. Drawing and quartering is none too severe for such conduct, of course.

The Canadians vote on the reciprocity question, so far as voting for members of parliament means voting on the principle; but after the election is over the agreement must go through the same course that it traveled over in the American Congress; so that reciprocity in practice is not so immediately impending as it may seem to some.

The point to the moral of Jerry Moore's 228 bushels of corn to the acre in South Carolina is somewhat blunted when one is informed that it cost him something over \$1.50 per bushel to produce it, because the Government is not likely to keep up the habit of buying corn of that kind at \$4 per bushel. Ninety bushels by the Holden method is quite different, but is surer to put money in the rural purse in the long run.

Duluth's new system, requiring traveling men to become members of the Board of Trade, need not frighten any one in the country—it is simply one way of putting receivers' representatives on their good behavior and putting a stop to what, with some traveling men, amounts to "uncommercial conduct." The temptation to talk badly of one's neighbor and competitor in business is a universal one; and it is one that too many of us yield to at times.

When, however, a man is required to put up his license privilege as a pledge of his gentlemanly conduct, the latter is likely to be exemplary.

Many elevator men figure as profit the difference between the price they pay the farmer and what they sell the stuff for on track; but the profit is never made until the cash is in the home bank, and "there's many a slip," etc., especially when the dealer takes anything the farmer offers as the "3 or better" he has sold and is buying to deliver.

Would farmers, co-operators and class uplifters, go into a "trust"? Probably not; but so human is the human nature of man, that even a farmers' elevator company in Minnesota has felt it incumbent to deny the insinuation that it was instrumental in closing up a rival house. On the contrary, say the co-operators, "this company invites competition." "Handsome is as handsome does," is the best answer to all malicious charges.

The Public Service Commission of Washington has undertaken to stipulate the cash discounts that may be taken for smut in wheat, the degree of smut in the sample fixing the discount. This is rather a radical departure; but it may work all right in Washington, the Pacific Coast markets being in a measure a "law unto themselves" by virtue of their comparative isolation. Moreover, smut and moisture, say, are different propositions, from a discount point of view.

Senator McCumber's many painful wails about the dreadful state of the farmer and his lowly condition in the social world, sound like a Canadian ten-cent piece rattling in Denver, in the face of the census report of 118 per cent increase in farm land values in ten years. In other words, the average value of every farm in the country is about \$4,480, not counting buildings, machinery, etc., worth \$2,730 each, with the live stock, etc., still to be counted! "Piffle!" Mr. Senator, "piffle!"

James Long, England's great agricultural expert, recently published an opinion that the 1911 harvest in England will be recorded as a whole as the poorest since 1879. Strangely enough, as it will sound to many American farmers, a not inconsiderable part of the money loss will be in consequence of the shortness of the wheat straw, which will amount to a thousand pounds per acre, and will more than offset some slight increase over last year in the yield per acre in grain.

The Second International Barley and Hop Exhibit, it is expected, will bring to Chicago in October next not only a comprehensive display of the world's best barley but the world's barley experts also, and for that reason it should have a pronounced influence on barley culture in this country. It is hardly necessary to remind growers that the vast brewing industry of this country stands ready to absorb all the brewing barley the country will raise; but along with that must go the warning that the slovenly methods of barley growers, as well as their ignorance of the characteristics of brewers' and maltsters' barley, is responsible for so much barley being worthless for malt-

ing purposes. In no branch of grain farming is science and care so much needed to secure the best results as in barley culture; and it is up to barley dealers to push the educational campaign.

The expulsion by the Chicago Board of Trade of a member for "skinning trades" (making false returns to customers) is only in line with the universal policy of the public commercial exchanges of the day to guarantee to all buyers and sellers in those marts absolute security for the interests entrusted to their members. At no time is a man so fully justified in assuming the integrity of his agent without fullest personal acquaintance, as when employing a member of a legally authorized public exchange.

A Minnesota country elevator agent, working at the munificent salary of probably not over \$75 a month, who had somewhat of a local reputation as a "reckless driver" of his own "machine," recently smashed into jail, having had a "blow-out" in the nature of his employer's discovery of a shortage in his accounts of about \$5,100, evidenced by some bogus grain tickets. This gasoline habit surely is a costly one, even on the frontier; but why do employers ignore it until a puncture occurs in their receipts?

Some of the co-operative companies in the Northwest are having trouble, even one or two that had been listed among the A1-ers. The farmers have yet to learn that to make their companies successful there must be a local demand for co-operation other than a traveling commission solicitor's desire to control some local business that he can't get without knocking his competitor's customer by organizing a rival business; and that once having put their eggs in the co-operative basket they must keep watch of the basket if they don't want any unauthorized sucking of the contents.

A Nebraska co-operative company recently failed, and the attributive cause was the "insidious activity of old-line companies." However, when a searchlight was thrown on the case, it was found that the manager's books were a blotter with a good many leaves gone—lost while he was attending to his politics—a man who never made any written report; nor could the investigating committee find any trace of \$4,077 except that it had disappeared, no one knew how. And then the elevator was sold to pay the bank's claims. And this is the "insidious opposition" of haters of co-operation!

The "new agriculture" movement is to be commended for one more reform—the conversion, in part, of the county fair from a cheap "hoss trot" and Eldorado of the wheel-of-fortune gambler to a brief school of education, wherever the management has been wise enough to incorporate a lecture program in the agenda of the grain and seeds exhibits. City people for the most part have managed these fairs on the theory that the farmer habitually lies awake nights thinking how, when and where he can spend his money and time at a fair in the most useless and disreputable manner; and the county fair in consequence, for many years, died out. With its revival in these

days, let us hope the managers will be wiser and treat the farmer like an intelligent man who has some other desire, when at a fair, than to play the fool for the benefit of the smelly "hoss" men and bediamonded sports who rob them of their money.

Oklahoma railway men have begun a "campaign of education" of elevator men in this little detail of leaky cars. It is not necessary, they tell the receptive reporter, for all these losses because of leaky cars; all that is necessary to stop them is to ship grain in sacks! California, we are incidentally told, "has a state law requiring the sacking of grain, and the practice has been successfully carried on in Germany for years." And so, says a local paper, a "Tulsa railroad man suggests that the practice will be adopted in Tulsa and other Oklahoma points soon." Simple, isn't it? And the railroads will furnish the sacks?

The Pennsylvania Railroad will hereafter handle no cars of 40,000 lbs. capacity or less, but will compel shippers to load larger ones and transfer freight delivered to that road from smaller cars of other lines into larger cars of the Pennsylvania. All such "small" cars will then be burned to prevent their falling into the hands of roads that might be disposed to give the smaller interior dealers or consumers of 300- to 400-bushel lots a chance to keep on doing business. This American habit of doing things on a big scale only is desperately hard on the small man who in the end is going to be driven out of practically every business, even that of cobbling.

No exchange can afford to permit its members to act as both agent and principal in the handling of consigned grain. It is wrong in principle, and a violation of the common law. Such deception, even where agent sells grain to a subsidiary company, is wrong, against the interests of the shipper, and against the welfare of the market. We have published decisions by many courts denying any agent the right to act as both principal and agent, and the rules of most of the exchanges proscribe such transactions.—*G. D. Journal*.

Well, out with it—what exchange does permit this sort of thing? If you are not shooting at a straw man, let the trade know whom you are firing at. Every man of common sense knows that a man can't act as principal and agent at the same time.

This is peculiarly a season when the country grain dealer who has a working familiarity with the "speculative side" of the grain exchanges, as it is utilized in handling cash stuff, might make that knowledge pay him handsome profits in the management of his own elevator business in the country, and that, too, without his speculating in the least. It is too long a story for this place; but it is first-class advice to the dealer who does not know how, to put himself in touch with a competent commission house and learn a thing or two about handling his grain with "option" accessories. It is a fact that a very large part of the profits terminal elevator houses make every year might just as well be made by country dealers if they would but take the advice and counsel of competent and acute commission men located in any of the great speculative and receiving markets. Noth-

ing pays so handsomely in handling cash grain as the marketing skill developed by the daily operator on 'change; and that occult knowledge of available opportunities for country shippers is the stock in trade of every really competent commission house; and clients who consult them freely are generally well paid therefor.

The latest conservation movement is the formation of the National Soil Fertility League, at Chicago. H. H. Gross is at the head of it; and his idea is to get funds from legislatures and Congress to send "soil experts over the entire country, starting with 400 or 500 and increasing to several thousand, possibly one to each county in the United States, whose duty it shall be to study the soils of the localities where they are sent, and induce the farmers to set aside a few acres for making tests under their directions." Great scheme for Chicago, a city whose great men boast of its \$50,000,000 ditch constructed to carry to the Gulf to be forever lost the fertility of thousands of farms sent here daily to feed our people, while Chicago men sit up nights to worry about the lost fertility of the farms!

With the return of rising prices we hear again of the things that the farmers and others are going to do, or ought to do, to "stop it." Mr. Yoakum of the 'Frisco is quoted as saying that, "It is the high cost of selling, rather than the high cost of living, that is working disadvantageously to the agricultural conditions of the United States." And so there is talk again of co-operation to eliminate the middleman. All of which suggests confusion of thought. Are not the high prices complained of harmful rather to the consumer than to the producer? Senator McCumber complained once that the times were out of joint because he had to pay at a swell hotel \$3.50 for a beefsteak and potatoes that the farmer received only 20c for, perhaps. Now, it is likely that the Senator was "stung" more than was the farmer; but he forgot the inability of the North Dakota farmer to serve that same steak and "spuds" personally to the Senator in New York; the middlemen cannot be eliminated if the Senator would eat Western beef in Washington. Speaker Adkins makes a somewhat similar complaint of the disappearance of country slaughterhouses and of some mills, as if there were not substantial causes for the phenomena to which the farmer himself contributes daily. That some middlemen's compensation, especially, perhaps, the final purveyors', seem to be exorbitant is true; but when farm products leave the farm, all that is added to their cost thereafter comes out of the consumer, not out of the farmer. It is possible that if these middle charges were less, the farmer might realize more, but it is doubtful—except in the case of grain. This may seem a strained exception, but it is a real one; for the reason that the organization of the trade through the grain exchanges limits the handling charges, eliminates waste and gives free and absolutely world-wide play to competition. The latter insures the farmer the highest prices for his products, while the former protects the consumer. Of all products necessary to man the grain products in the form of flour and meal show a less appreciation of the farm price on the consumer's table, due to

the "middleman" and the intermediate industry of milling, than any products that can be named. If the poultry, dairy products, fruits, meats, etc., were all handled in like manner and under the same conditions as grain, the cost of living for food alone would show, doubtless, a vast reduction. Yet the "board of trade" is cursed a hundred times for apocryphal sins where once a "knock" is recorded of "Water Street" and the grocer's doings.

Another alfalfa pest has been discovered in the West, called the "crown gall," that affects the roots and tops of the plant. It is reported from Medford, Ore., and is said to be unknown to the Department of Agriculture at Washington, D. C., although it was discovered by Professor P. J. O'Gara, former Government pathologist, now employed by Jackson County. The affected plants show numerous galls which inhibit the growth and which, if allowed to spread, will destroy the alfalfa crop of an entire valley. The Government has taken cognizance of this new enemy of this valuable plant, whose enemies seem to increase as its habitat enlarges and its immense value as a forage and nitrogen crop comes into wider appreciation.

An Eastern paper, commenting on the new system of quantitative crop reporting by the Government, says:

The Department of Agriculture gets its estimates from thousands of correspondents, most of whom are farmers, and the rest have similar interests. The farmer is naturally pessimistic regarding weather and bugs, and he is also keenly alive to the fact that a big crop is certain to lower the prices;—

and so forth, the inference being that the estimates are too low. But isn't the contrary the truth—that they have been too high? Certainly in the census year 1909 they were so for wheat and oats, so far as data already published indicate. The farmer may want the crops reported low to raise prices, but he also wants the crops large as a basis for computing real estate values. Take your choice as to mercenary motives.

Rice is a much more valuable and very considerably cheaper food than the potato and much more palatable, if people only knew it. If, therefore, Southern rice men—growers and millers—would spend but a portion of the time and money they devote to stifling trade in rice by lobbying for more duty, to stimulating the rice eating habit in this country and to reducing the retail price of rice to the consumer, the complaint of over-production, stagnation in the trade, etc., would be measurably less than it now is. Rice growing is but going through the usual course—the discovery that the country can produce rice in vast quantities, coupled with immense profits in the industry to those who went in when it was new, has resulted in a too rapid increase of the crop, compared with the demand from a people who have always looked upon rice rather as a luxury than a staple food. Let the rice men educate the people to eat more rice and less potato and both they and consumer will benefit—if the price of rice can be made a fair one at the grocery stores, which it is not at present, compared with the rough rice price or that of the potato. The time is auspicious, in view of the high price of "spuds."

TRADE NOTES

Among the many exhibitors at the recent Indiana State Fair at Indianapolis was the Johnson & Field Mfg. Co., of Racine, Wis., showing a full line of the grain and seed cleaners.

During the past month the John Lauson Mfg. Co., of New Holstein, Wis., has been exhibiting its famous line of "Frost King" gasoline engines at the state fairs of Minnesota, Indiana and Nebraska.

The name of the Gibbs Gas Engine Co. of Atlanta, Ga., has been changed to the Standard Gas Power Co. The change was made in order to define the wider scope of the business, which is the manufacture of gas producers for both fuel and power, as well as gas engines.

We have received Bulletin No. 41 from the Jeffrey Manufacturing Co. of Columbus, Ohio, showing their Jeffrey Single Roll Coal Crusher. This machine is of handsome appearance and is of the same high grade which characterizes this company's grain handling and conveying machinery.

Moulton & Evans, General Contractors, of Minneapolis, have secured the contract for building the 300,000 bushel grain storage elevator for the Trans-Mississippi Grain Co., of Omaha. The new elevator will be built in connection with the company's present elevator plant at Council Bluffs, Iowa.

The Detroit Milling Co., of Adrian, Mich., will use their storage tanks, that remained after the fire last spring, for storage purposes this winter. For protecting the grain while in storage they have installed the Zeleney Thermometer system, purchased of the Western Fire Appliance Works, Chicago.

The Barnett & Record Co. of Minneapolis, Minn., has been awarded the contract of the Bay State Milling Co. of Winona, Minn., for an eight story fireproof mill building to house the machinery for the new mill which will take the place of the mill recently burned. The building will be of fireproof construction and is expected to be under roof by January 1.

The Muncie Gas Engine & Supply Co. of Muncie, Ind., are building an additional machine shop at their plant on Liberty street. The new building is a steel structure of modern construction, 200x70 feet and adds to the capacity of the company for the manufacture of the Muncie Oil Engines. The various shops of the company now cover about four acres of ground.

The Cavers Elevator Company of Omaha will double the capacity of its elevator plant at Council Bluffs, Iowa, to take care of the present crop. The old plant had a capacity of 125,000 bushels, and the present addition will give a capacity of 250,000 bushels with a handling capacity of forty cars per day. The contract for the new work has been let to Moulton & Evans, general contractors, of Minneapolis.

"The melancholy days are come" do not apply to grain elevator owners who have the advantages and services of the special machines of the S. Howes Co. of Silver Creek, N. Y. The September calendar illustrates the "Eureka" Sack Turner and "Eureka" Sack Cleaner. The calendar card states they are "thoroughly effective, saving time and money," and that there are 30 days in September during which they ought to be installed. The devices cost some money; the calendar card comes free.

The Saxony Mills of St. Louis, Mo., have commenced the erection of a reinforced concrete grain elevator of 100,000 bushels capacity. The space available between the tracks on the property gives less than 21 feet for the storage with a length of 114 feet. The engineers and contractors, the MacDonald Engineering Co. of Chicago, have devised an ingenious arrangement of the bin storage, by slightly enlarging the width of the house above the track space so as to give a maximum width of 24 feet which cantilevers the walls on each side. The storage will be divided into seventeen rectangular bins, ranging in capacity from 1,500 to 8,000 bushels each. Grain will be received from each track on the sides of the building and weighed in scales of

1,800 bushels capacity. Connections will be made both by spouting and conveyors to the mill plant. There will be three legs of 4,000 bushels capacity each, and an automatic scale for weighing mill deliveries.

The John S. Metcalf Co., Limited, Montreal and Chicago, are drawing plans for additional machinery installation for the Globe Elevator Company, Calgary, to consist of a 10,000 bushel shipping leg, 2,000 bushel scale, shipping spout and appurtenances. This machinery is to go in the 250,000 bushel elevator built for the Globe Elevator Company two years ago by the John S. Metcalf Co., Limited, the business having already outgrown the elevator.

Through an error last month the number of pages in the Weller Mfg. Co. Catalogue No. 20 was given in their advertisement as 275. The fact is that no fewer than 575 pages are contained in this encyclopedia of Weller-made products. The appearance of the catalogue is very fine, being bound in blue cloth covers with the lettering in white. It measures 6½ x 9½ and is 1¼ inches thick. The size makes it convenient for easy reference and takes up but little room on the desk. All of the company's machines and specialties are described and illustrated and every elevator owner, manager and superintendent should write for a copy of this new catalogue which is sent free upon request.

The Day Company of Minneapolis, Minn., have secured a building at No. 38 S. Twelfth street and remodeled it for their general offices, which were formerly in the factory. The new office building is only a stone's throw from the plant and will be more convenient for customers visiting the works. The old offices will be used as an addition to the carpentering and wood working department and the complete plant now is 200x66 feet and two stories in height. The new office is a two story building, the general offices being on the first floor while the second floor is devoted to the drafting department. The plant has been very busy during the summer as there has been a constant good demand for the Day Dust Collecting system from all sections of the country.

[For the "American Elevator and Grain Trade."]

SOME DRY YEARS.

BY P. S. GOODMAN.

Dry years have a habit of turning up at stated periods, like the city relative on the farm in haying time. The world has noted this persistent visitation, but few have been wise enough to prepare for its advent. Old Egypt noted the regularity of unpropitious and propitious seasons, and history has enshrined in the sacred volume the only instance of real preparedness, when an early Hebrew displayed his race's great business acumen by storing the grain of the good years against the poor ones and merchandising it to great advantage. The modern merchant, were he so inclined, could make several fortunes in an active business life by laying in store the grain of fruitful years, and running less risk in the merchandising prospect than in any other method of business operation.

A cycle of twenty years has always turned up a dry period of three and four years' duration, sweeping over the continent and centering in the sharply inclined plains of the West, where rain falls flow away as from a roof, never leaving much in store in soil and less in streams. The periodicity of recurring dry seasons can be traced back very accurately. The twenty-year major swing is here. The early 'nineties are still fresh remembrances; the dry years of the 'seventies, of the 'fifties, of the 'thirties, can be checked off in our annals beyond that the limited area, and small agricultural operations were passed by without comment by the chroniclers.

The major cycle has ranged from two to four years; and midway between them there has always been a minor drouth. It is peculiarly interesting that the minor cycle has been more destructive to the crops of one year than the major cycle on the crops of one year. The culmination of the present twenty-year cycle, this year, has been as severe as in 1894, but it does not compare in damage with the

minor cycle of 1881. There have been more destructive dry years, but the lack of statistical data debars us from making comparison—from measuring the damage in bushels or in tons. The culmination in the 'fifties was almost tragical in its effect in the East which then held the agricultural supremacy.

The losses this year have been more largely from the dry weather of last season, leaving the soil in a dry state without sub-moisture, than from actual deficiency of rainfall. Except in the Southwest and on the elevated sections of the West, the rainfall would have been abundant for crop making had it been assisted by ordinary sub-moisture. We have to go back to 1881, a minor dry year, to find real destruction from the absence of rain and from continued high temperatures.

Our losses in this year of trouble have not been great, if we measure by percentages. The loss in the crops that are reckoned by bushels is only 12 per cent, and the heaviest is in oats. The hay loss is the heaviest, with 25 per cent; and this adds to the damage very materially. In 1881 the loss to measured crops was 23 per cent, in both years comparisons being made with large yields the previous season. The hay loss that year was less, having been but 20 per cent; but, on the whole, the actual damage on weighted computation was 22 per cent, as against 18 per cent this year, assuming that the corn crop will finally attain to 2,800,000,000 hus.

The losses in food and feed stuffs have been severe and there must be contraction somewhere. The past is only worth attention as a guide to the future. The trade has assumed from the time that trouble seemed imminent that there would be higher prices. It based this assumption upon the rising markets that in recent years followed the restriction of one or another of our agricultural products. Lately the markets have not been so buoyant, and the anticipated advances have not developed; in fact, there has been a decline in wheat and oats and a slightly lower corn price from the July record.

While we can measure losses, it is a different thing to measure prices on the losses, when all things suffer as this year. There are some striking contraries in the crops and prices. The corn crop of 1894 was the smallest in years, and followed on the heels of two small crops, yet the lowest price made in the market was made that year. In fact, all cereals were depressed, and the cause was economic—a country surfeited from years of speculation was undergoing liquidation of values. The business of the Nation was depressed; idleness of an enforced character was country wide; consuming power was present, but the ability to purchase was limited; and the short crops proved disastrous.

In the shortage of 1881 there was another story. All grains had a strong advance for six months or more. Speculation which had developed in 1877 reached its apex that year; railroad building was tremendous; the tide of immigration was heavy; money was plentiful; and there was very little stoppage to the earning power of the people.

This year we have a shortage which, had it occurred when business was active, would mean higher prices than we have had in years for our cereals—wheat an exception on account of the probability of reciprocity. It is significant that the great crop of the country will not be as badly hurt as anticipated. Corn in the rich agricultural states will be a good crop, and it promises continued feeding operations on a generous scale.

Though there is much said about the heavy agricultural losses, they are not great enough to bring about a widespread disturbance. The abundance of the past three years minimizes the losses that have been reported. Coming at a time when the Nation has been slowing down, trying to recover from a long period of extravagance and expansion, the shortage in agricultural products will prolong the readjustment and liquidation, and bring us down to a more substantial basis to start afresh next year, when the conditions promise to be better from a moister soil.

It is peculiar to dry years that the losses in wheat are the smallest of all crops, and in each year of this character it has been the winter grain which

has saved the day. Spring wheat, requiring continuous moisture to feed continuous growth, has always gone to pieces under drouth, and especially so when there has been no sub-moisture. This year the shortage in wheat is evident in the country; and wheat, being a world property, answers more quickly to the supply and demand even in years of depression. The producer this year finds no solace in the wheat market. The admission of the Canadian crop, which seems certain, furnishes this continent with a supply in excess of requirements, and for the first time in some years the farmer, the grain handler, is forced to study the Liverpool market and to follow its fluctuations.

While there is in the business situation sufficient to repel thoughts of a repetition of the high prices that followed the shortage of 1881, there is no anticipation of the heaviness of 1894. The damage has been great, but it does not spell disaster in itself.

INSPECTORS MEETING.

The annual meeting of the Chief Grain Inspectors' National Association will be held in Omaha, Nebraska, October 9, 10 and 11, 1911.

Store wheat fills future contracts such as September, December and May. Two Red in store is worth what speculators or millers are willing to pay for futures. Two Red on track at Toledo, spot or arrive, is worth only what it will sell for immediate shipment, because it cannot be unloaded on storage and carried, as the elevators are full. Cargo two red for shipment has sold at fully two cents under the price in store.—C. A. King & Co.

EXPORTS AND IMPORTS.

The following is a statement of the exports and imports of various cereals, seeds, etc., for the month of July, 1911, and for the seven months ending with July, 1911, as reported by the Bureau of Statistics, Department of Commerce and Labor (quantities only unless otherwise stated):

ARTICLES.	July, 1911		SEVEN MONTHS, ENDING JUNE	
	1910	1911	1910	1911
Exports—				
Barley, bu.	200,328	183,270	1,146,820	2,266,149
Buckwheat, bu.	50	10	63,906	40
Corn, bu.	2,181,273	2,409,903	25,886,208	47,183,335
Corn Meal, bbls.	30,504	37,315	194,231	319,496
Oats, bu.	265,838	188,330	1,319,286	1,355,505
Oatmeal, lbs.	386,003	2,281,935	6,673,030	24,751,519
Rice, lbs.	406,290	14,461,251	5,912,633	26,777,504
Rye, bu.	.....	2,364	17,168	3,519
Rye Flour, bbls.	575	185	2,551	3,014
Wheat, bu.	862,170	3,259,531	10,725,796	12,595,067
Wheat Flour, bbls.	504,488	670,298	3,958,985	5,884,029
Bran, Millfeed, etc., tons.	3,339	8,597	29,643	52,983
Dried Grains, etc. tons	8,925	7,659	40,737	48,167
Rice bran and polish, lbs.	2,710	.....	3,813,729	3,916,948
Total Breadstuffs	\$5,864,206	\$9,338,042	\$55,943,251	\$75,236,935
Glucose and Grape Sugar, lbs.	15,093,946	10,211,566	101,657,862	107,806,492
Hay, tons.	3,793	3,971	29,874	30,280
Oil Cake and Oil-Cake Meal:—				
Corn, lbs.	3,675,758	7,271,740	32,312,547	52,977,378
Cotton Seed, lbs.	15,470,018	28,366,440	343,590,140	421,706,952
Flaxseed or Linseed lbs.	57,539,597	40,135,167	419,808,119	306,270,253
Vegetable Oils:—				
Corn, lbs.	722,810	1,460,180	6,482,247	18,365,708
Cotton Seed, lbs.	8,013,946	14,835,688	107,710,002	163,363,727
Linseed, gals.	9,972	16,333	98,127	113,013
Clover Seed, lbs.	140,646	931	1,884,841	1,345,887
Cotton Seed, lbs.	448,100	224,585	13,359,862	7,054,751
Flax Seed, bu.	24	19	4,138	835
Timothy Seed, lbs.	1,055,256	45,923	14,684,263	4,937,600
Other Grass Seed, val.	\$3,567	\$25,362	\$119,666	\$182,311
Beans, etc., bu.	19,796	23,364	178,581	139,036
Imports—				
Corn, hus.	.....	988	.....	988
Oats, bu.	2,296	1,250	732,975	84,781
Wheat, bu.	1,483	1,211	135,446	503,238
Wheat Flour, bbls.	15,085	22,333	111,901	71,439
Rice:—				
Uncleaned, including paddy, lbs.	5,985,104	4,228,658	14,228,652	128,008
Cleaned, lbs.	.....	876,276	876,276	22,159
Rice, Flour, Meal, etc. lbs.	11,723,648	18,755,123	82,252,224	79,816,681
Castor Beans, bu.	76,147	109,524	382,303	564,598
Clover Seed, lbs.	103,162	927,631	5,860,039	14,537,055
Flax Seed, bu.	583,236	863,284	4,670,447	6,290,943
Beans, etc., bu.	42,026	44,663	472,646	480,402

EXPORTS OF FOREIGN MERCHANDISE.

Oats, bus.	.....	52,300	1,500
Rice:—			
Uncleaned, including paddy, lbs.	472,128	457,061	4,584,179
Cleaned, lbs.	.....	210	1,430
Rice Flour, etc., lbs.	1,250	.....	132,071
Wheat, bus.	.....	31	8
Wheat Flour, bbls.	.....	128	88,040
Clover Seed, lbs.	.....	.....	.....
Other Seeds, value	1,549	877	27,027
Beans, bus.	.....	.....	11,978

(*) Six months, Jan. to June, inclusive. (†) Since July 1.

RECEIPTS AND SHIPMENTS.

Following are the receipts and shipments of grain, etc., at leading receiving and shipping points in the United States for the month of August, 1911:

BALTIMORE—Reported by James B. Hessong, Secretary of the Chamber of Commerce.

Articles	Receipts		Shipments	
	1911	1910	1911	1910
Wheat, bushels.....	2,075,466	1,339,505	1,707,081	544,000
Corn, bushels.....	205,123	254,979	179,228	90,584
Oats, bushels.....	937,831	787,606	2	150
Barley, bushels.....	1,321	1,869	.....	.....
Rye, bushels.....	10,745	29,143	.....	.....
Timothy Seed, bus.	7,862	7,152	.....	2,417
Clover Seed, bus.	.....	1,594	.....	447
Hay, tons.....	5,408	4,012	1,150	895
Flour, barrels.....	207,507	198,582	51,572	49,757

BUFFALO—Reported by Secretary of the Chamber of Commerce.

Wheat, bushels.....	8,584,704	4,330,410	.....	.....
Corn, bushels.....	2,263,850	2,901,795	.....	.....
Oats, bushels.....	325,000	891,392	.....	.....
Barley, bushels.....	56,937	238,500	.....	.....
Rye, bushels.....	40,000	20,000	.....	.....
Other Grass Seeds, lbs.	.....	.....	.....	.....
Flax Seed, bushels.....	142,191	93,991	.....	.....
Flour, barrels.....	959,523	873,140	.....	.....

CHICAGO—Reported by George F. Stone, Secretary of the Board of Trade.

Wheat, bushels.....	8,850,500	11,784,400	7,251,900	3,964,700
Corn, bushels.....	6,708,000	8,021,750	5,759,200	5,954,650
Oats, bushels.....	13,317,600	24,372,800	6,731,000	8,421,600
Barley, bushels.....	1,188,000	862,500	217,800	247,500
Rye, bushels.....	174,000	105,000	17,400	21,200
Timothy Seed, lbs.	4,450,500	1,877,600	2,451,700	1,825,100
Clover Seed, lbs.	270,000	211,100	118,300	48,500
Other Grass Seeds, lbs.	1,050,600	976,200	1,472,200	1,107,300
Flax Seed, bushels.....	72,900	175,000	2,400	14,500
Broom Corn, lbs.	351,300	475,900	923,900	368,700
Hay, tons.....	28,428	22,105	685	1,516
Flour, barrels.....	575,969	748,694	673,800	713,033

CINCINNATI—Reported by W. C. Culkins, Superintendent of the Chamber of Commerce.

Wheat, bushels.....	245,120	.....	227,736	.....
Corn, bushels.....	821,269	.....	524,305	.....
Oats, bushels.....	877,750	.....	548,288	.....
Barley, bushels.....	7,410	.....	1,012	.....
Rye, bushels.....	41,684	.....	16,141	.....
Malt, bushels.....	129,000	.....	13,950	.....
Timothy Seed, bgs.	2,615	.....	1,058	.....
Clover Seed, bgs.	7,543	.....	1,392	.....
Other Grass Seed, bgs.	9,253	.....	3,917	.....
Flax Seed, bushels.....	.....	.....	.....	.....
Hay, tons.....	11,064	.....	5,996	.....
Flour, bbls.....	131,576	.....	71,277	.....

DETROIT—Reported by F. W. Waring, Secretary of the Board of Trade.

Wheat, bushels.....	389,882	163,063	36,520	2,500
Corn, bushels.....	262,540	216,487	101,421	87,021
Oats, bushels.....	415,467	500,282	73,240	23,851
Barley, bushels.....	2,240	19,664	.....	.....
Rye, bushels.....	31,748	37,254	5,312	2,000
Flour, barrels.....	29,882	26,557	27,866	24,473

DULUTH—Reported by Chas. F. MacDonald, Secretary of the Board of Trade.

Wheat, bushels.....	1,252,701	3,200,016	1,001,466	2,159,033
Corn, bushels.....	21,606	31,160	171,363	13,503
Oats, bushels.....	89,249	105,098	121,973	195,712
Barley, bushels.....	296,467	674,363	110,264	660,087
Rye, bushels.....	98,563	13,287	40,000	20,200
Flax Seed, bushels.....	14,341	50,936	148,481	98,498
Flour, bbls.....	426,900	515,450	461,215	543,925
Flour Production.....	.....	.....	.....	.....

KANSAS CITY, MO.—Reported by E. D. Bigelow, Secretary of Board of Trade.

Wheat, bushels.....	3,832,800	8,728,800	1,987,200	5,124,000
Corn, bushels.....	1,477,200	1,482,000	939,600	1,088,400
Oats, bushels.....	588,200	761,600	328,100	377,400
Barley, bushels.....	5,600	4,200	28,000	4,200
Rye, bushels.....	34,100	9,900	37,400	8,800
Kafir Corn, lbs.	.....	.....	.....	.....
Flax Seed, bushels.....	7,000	900	2,000	8,000
Bran, tons.....	1,040	1,120	4,980	10,540
Hay, tons.....	19,032	40,704	7,224	9,828
Flour, barrels.....	13,250	3,000	180,500	308,500

MILWAUKEE—Reported by H. A. Plumb, Secretary of the Chamber of Commerce.

Wheat, bushels.....	1,406,250	1,493,860	157,847	620,136
Corn, bushels.....	689,300	584,210	322,258	326,618
Oats, bushels.....	776,900	1,424,400	418,331	735,350
Barley, bushels.....	1,761,200	566,800	198,463	110,200
Rye, bushels.....	196,860	67,500	24,380	17,608
Flax Seed, bushels.....	.....	2,400	.....	3,600
Hay, tons.....	2,922	2,785	156	178
Flour, bbls.....	326,690	283,560	313,169	292,148

MINNEAPOLIS—Reported by H. W. Moore, Statistician of the Chamber of Commerce.

Wheat, bushels.....	6,662,000	9,380,410	2,342,230	2,166,610
Corn, bushels.....	663,150	526,910	241,100	284,140
Oats, bushels.....	832,860	2,284,320	233,190	888,520
Barley, bushels.....	1,126,600	1,043,470	500,710	1,055,180
Rye, bushels.....	391,940	161,500	123,240	86,920
Flax Seed, bushels.....	191,250	135,900	8,590	24,600
Hay, tons.....	3,020	6,030	640	1,730
Flour, bbls.....	27,409	16,637	1,395,655	1,288,091

MONTREAL, QUEBEC, CANADA—Reported by George Hadrill, Secretary of the Board of Trade.

Wheat, bushels.....	3,794,814	2,410,992	2,500,317	1,742,704
Corn, bushels.....	443,033	265,188	1,243,286	161,137
Oats, bushels.....	1,580,182	100,022	1,148,493	346,163
Barley, bushels.....	80,083	66,726	25,115	102,745
Rye, bushels.....	.....	1,778	.....	.....
Flax Seed, bushels.....	44,944	.....	940	.....
Flour, bbls.....	sk 423,281	bb 95,092	sk 326,783	bb 209,417

NEW YORK—Reported by H. Heinzer, Statistician of the Produce Exchange.

Wheat, bushels.....	4,361,500	.....	3,067,164	.....
Corn, bushels.....	490,688	.....	387,709	.....
Oats, bushels.....	3,279,175	.....	48,882	.....
Barley, bushels.....	71,435	.....	.....	.....
Rye, bushels.....	2,300	.....	.....	.....
Timothy Seed, lbs.	.....	.....	.....	300
Clover Seed, lbs.	bgs. 2,495	.....	.....	4,564
Other Grass Seed, lbs.	.....	.....	.....	.....
Flax Seed bushels.....	220,806	.....	2,742	.....
Hay, tons.....	26,346	.....	b'ls 14,556	.....
Flour, bbls.....	690,030	.....	321,478	.....

OMAHA—Reported by F. P. Manchester, Secretary of the Omaha Grain Exchange.

Articles	Receipts		Shipments	
	1911	1910	1911	1910
Wheat, bushels.....	1,640,400	1,066,800	1,110,000	423,000
Corn, bushels.....	1,492,800	2,336,400	1,095,000	1,886,000
Oats, bushels.....	725,900	703,800	315,000	250,500
Barley, bushels.....	127,400	.....	24,000	1,000
Rye, bushels.....	5,500	8,800	5,000	8,000

PHILADELPHIA—Reported by Frank F. Marshall, Secretary of the Commercial Exchange.

Wheat, bushels.....	2,004,290	1,151,765	1,278,292	400,372
Corn, bushels.....	108,975	89,822	.....	.....
Oats, bushels.....	1,115,161	805,824	.....	.....
Barley, bushels.....	.....	13,000	.....	.....
Rye, bushels.....	1,600	800	.....	.....
Timothy Seed, bags.....	210	585	.....	.....
Clover Seed, bags.....	.....	800	.....	.....
Other Grass Seeds, bags.....	.....	.....	.....	.....
Flax Seed, bushels.....	5,884	5,370	.....	.....

ELEVATOR AND GRAIN NEWS

ILLINOIS.

A new elevator may be erected at South Jacksonville, Ill.

Archie White has been putting up an elevator at Rollo, Ill.

The Conlin Elevator at DeKalb, Ill., has been completed.

There is talk of erecting a grain elevator at Carmi, Ill.

The new elevator at Euington, Ill., is fast nearing completion.

The office of the Farmers' Elevator at Yorkville, Ill., is being enlarged.

The Meredosia Farmers' Grain Co. is building an elevator at Meredosia, Ill.

John M. Lieb & Son of Edgewood, Ill., have not yet finished their elevator.

W. H. Moore has leased his elevator at Rockston, Ill., from C. E. Phelps.

An addition to their elevator is being built by West Brothers of Manteno, Ill.

The North End Elevator, at Mendota, Ill., is being remodeled and enlarged.

The new grain office of S. G. Crawford, at Bondville, Ill., has been completed.

The new elevator at Caton Farm, Ill., was put into operation a short time ago.

The Martinton Farmers' Grain Co., of Martinton, Ill., is building new coal sheds.

Abbey & Gamble of Kirkwood, Ill., are overhauling their grain scales and repairing them.

The elevator of Kaga & Co. at Carmago, Ill., has been sold to Reville & Quick of Atwood, Ill.

The old elevator at Avon, Ill., will be torn down and a new one erected to take its place.

The elevator of the Turner Hudnut Co., at Havana, Ill., is being remodeled and improved.

The Hazenwinkle Grain Co., of Heyworth, Ill., will erect a 50-foot addition to its elevator.

It is rumored that the farmers have sold their elevator at Literberry to Mr. Savage of Virginia.

F. B. Vennum, of Champaign, Ill., recently took over all the interests in the Miles Elevator at Fisher, Ill.

The Neola Elevator Co. is running its elevator at Leland, Ill., which it had leased to the Farmers' Co. for the past six months.

Work has been started on the rebuilding of the elevator of C. M. Meyer, south of Frankfort, Ill., which was damaged by fire a short time ago.

The farmers six miles east of Wataga, Ill., on the Galesburg & Great Eastern Railway, have organized and built a portable elevator and stock yard.

The Burrell Engineering & Construction Co. is making extensive repairs on the line of elevators through Illinois of the Neola Elevator Co. of Chicago.

J. A. Roney has sold his elevator at Wyckles, Ill., to G. W. Leonard of Decatur for a consideration of \$4,000. The elevator has a capacity of 10,000 bushels.

J. P. Wrenn has transferred his elevator at Roanoke, Ill., to his son, Robert, who will manage the business as its owner. Mr. Wrenn, Sr., has retired from the business.

William McCormick and John L. McCormick have purchased the elevator of D. H. Gemberling, at Emden, Ill., and will use the ground for the accommodation of building supplies.

Douglas Snowden, who has operated the elevator at Lerna, Ill., since the financial troubles of his brother, recently sold the house to W. E. Ashbrook, who has taken possession. The consideration was \$4,000.

The Farmers' County Line Elevator Co., at Alexis, Ill., has been incorporated with a capital stock of \$2,500, by T. D. Likely, Frank McCutchan and Harry E. Swigert. The company will erect an elevator.

An elevator will be built by C. O. Swift, at Normal, Ill., which will be completed by the first of the year. Mr. Swift is at present leasing the elevator recently purchased by John and James Humphrys.

The Burrell Engineering & Construction Co. are preparing plans for a new elevator for the Saybrook Grain Co. at Saybrook, Ill., and for the Lincoln Grain Co. of Lincoln, Ill., for an elevator to replace their house burned at Lawndale, Ill.

The Crew Grain Co., of Blue Mound, Ill., has purchased the 45,000-bushel elevator at Beason, Ill., on the Illinois Central Railroad from C. A. Burks & Co., for a consideration of \$5,000. The yearly

output of the elevator is between 400,000 and 500,000 bushels of grain.

The Farmers' Elevator, at Wedrou, Ill., was sold at auction recently to C. W. Peterson, of Grand Ridge, Ill.

The Peterstown Farmers' Elevator & Supply Co., of Peterstown, Ill. (mail Mendota), has been incorporated with a capital stock of \$3,400, by John Sondergoth, Theodore Hopp and John A. Klein.

Sherman Frederick is erecting a new elevator at Clarence, Ill., to take the place of the one recently destroyed by fire. C. S. Fuller, of LaFayette, has the contract. The elevator will be built of wood, covered with iron sheeting, and the foundation will be of concrete.

The Farmers' Grain Co. has completed its new grain elevator at Middletown, Ill. It is of cribbed construction, with capacity of 25,000 bushels. The Union Iron Works furnished the machinery equipment and the engineers were McAllister & O'Connor, of Chicago.

Mrs. McCrackin, of Monmouth, Ill., recently sold her elevator at Normal, Ill., to Messrs. James and John Humphreys, who will take possession on January 1, 1912, when the lease of C. O. Swift, the present operator, will expire. The consideration was \$2,500.

Secretary S. W. Strong, of the Illinois Grain Dealers' Association, reports that the Mazon Farmers' Elevator Co. succeeds Strong & Ely, at Mazon; R. F. Wrenn succeeds J. P. Wrenn, at Roanoke; D. C. Belsley succeeds Garber & Belsley, at Roanoke; C. H. Woods succeeds Woods & Holdaman, at Springfield; C. N. Dauberman succeeds William Wykle, at Mansfield; Whalen Brothers & Grant succeeds Whalen Brothers, at Charleston; Charles Selby succeeds Tackwell & Filson, at Paxton; Lane & Hendrix succeeds W. T. Lane & Co., at Lane; John S. Lisenby succeeds Ed. Hendrix & Co., at Lane; Schule & Co. succeeds Henry Schule, at Chase; John J. Guild succeeds A. W. Weimer & Co., at Geneseo; T. T. Gelvin succeeds Gelvin & Colwell, at La Fayette; Galva Grain Co. succeeds Richard Cox, at Bishop Hill; the Galva Grain Co. succeeds the Jackson Grain Co., at Bishop Hill and R. E. Coffman succeeds A. R. Calister. Prather & Groves are dealers at Sherman; R. E. Cox is a dealer at Sherman; Richter & Ball are dealers at Charleston; Couliu Brothers are new dealers at De Kalb, and the Kaneshville Grain & Supply Co. is a new dealer at Kaneshville Electric R. R.

SOUTHERN AND SOUTHWESTERN.

A grain elevator will be erected by the Home Milling Co., at Greenville, Ky.

Martin Besteiro plans the construction of a grain elevator at Brownsville, Texas.

It is reported that R. Mays Cleveland will build a grain elevator at Marietta, S. C.

O. P. Jackson & Co., of Houston, Texas, recently moved into their new building at that place.

Nelson & Palm have recently purchased an elevator at Claude, Texas, and will engage in the grain business.

A new firm known as L. W. Bussey & Co., has opened for business in Sherman, Texas. The company will deal in seed, hay, grain and coal.

The business, stock and furniture of the Oklahoma Hay & Grain Co., of Muskogee, Okla., has been purchased by the Southern Hay & Grain Co.

A company with a capital stock of \$40,000 is being organized by the farmers of Simpson County, Ky., for the purpose of erecting an elevator and mill.

The Farmers' Warehouse Co., has been organized at Mapie, La., with a capital stock of \$25,000. F. M. Broussard is president, and James Amy, secretary.

L. L. Sellers, who was formerly engaged in the grain business in the employ of some parties at Panhandle, Texas, is now in business on his own account.

The Scotch Co., of Walnut Cove, N. C., wish to represent manufacturers and producers of food-stuffs, grain, crossties, cement, brick, coal and metal supplies.

The Home Warehouse Co. will erect an elevator at Owensboro, Ky. The company will incorporate the grain elevator company with a capital stock of \$15,000.

The Washington Gin & Grain Co. of Washington, Okla., has been incorporated with a capital stock of \$10,000, by C. G. Bible, M. Morgan and William Morgan, Jr., all of Norman.

A new elevator and mill will be erected on the site of the Drummond Mill & Elevator Co. at Drummond, Okla., by Charles Cotter of Ames, Okla., who recently purchased the property.

E. Wilkinson and Howard Douglass of the Western Grain Co., have purchased the interests of G. B. B. Comer in that concern at Birmingham, Ala. The sale, which includes an option on a warehouse,

involved about \$80,000. The warehouse will be turned into a grain mill.

D. P. Reid & Brothers, of Norfolk, Va., have been incorporated with J. O. Reid as president; R. J. Gowsley, treasurer; and L. J. Smithwick, secretary. The capital stock is \$75,000.

The Kentucky Public Elevator Co., of Louisville, Ky., which was established over thirty years ago, and which has \$150,000 in stock outstanding, intends to expend about \$100,000 on improving and enlarging its plant.

S. M. Bird and D. B. Darby, formerly manager and bookkeeper respectively, for the Texas-Oklahoma Grain Co., at Vernon, Texas, have entered the grain business at Chillicothe, Texas, under the name of the Chillicothe Grain Co.

MINNESOTA AND WISCONSIN.

An elevator will be erected at La Crescent, Minn.

The Huntting Elevator, at Oakland, Minn., is being repaired.

An elevator is being built by T. H. Cochrane at Pardeeville, Wis.

Repairs are being made on the Thorpe Elevator at Flaming, Minn.

A farmers' elevator company has been organized at Kilkenny, Minn.

W. F. Markham has purchased the elevator at Lesueur Center, Minn.

The Sleepy Eye Elevator at Tracy, Minn., has been sold to Louis Railson.

A new 6,000-bushel elevator will be built by the farmers at Ortonville, Minn.

Work on the Van Dusen Elevator at Minneota, Minn., is progressing rapidly.

An addition to the elevator and a new mill office is being erected at Morristown, Minn.

J. M. Peterson will open the elevator at Hayfield, Minn., which has been closed for the past year.

L. L. Babcock has installed an electric motor to run his elevator and feed mill at Dundas, Minn.

Alex Newdall has purchased the old Bingham Elevator at Cobden, Minn., and is remodeling it.

New equipment is being installed and repairs made on the elevator of Prust & Buelow at Jefferson, Wis.

The Speltz Grain and Coal Co. has purchased the business of the Federal Elevator Co., of Brice-lyn, Minn.

A dump scale has been installed and other improvements made on the elevator of Thomas Gribben, at Lanesboro, Minn.

A. O. Sanstead is repairing the elevator of the Minneapolis & Northern Co., at Garfield, Minn., which he recently purchased.

Manager Nygren will carry on the business of the Canby Mutual Elevator Co., of Canby, Minn., which recently closed its grain operations.

A farmers' elevator will probably be erected at New Prairie, Minn., this fall, as the railroad intends to lay a side track for the promoters.

The Banner Grain Co. of Minneapolis, Minn., has leased elevator D from the George C. Harper Co. The house has a capacity of 75,000 bushels.

An elevator was opened at Royalton, Minn., on September 1, by I. W. Bouck. The Powers' Elevator Co. operated it during the past year.

Some improvements are being made on the elevator at Kenyon, Minn., among which is the erection of a brick chimney on the engine house.

A new cleaning apparatus has been installed in the Farmers' Elevator at Huron Lake, Minn. It is guaranteed to clean 800 to 1,000 bushels of grain an hour.

The Northern Elevator Co., of Manitowoc, Wis., has increased its capital stock from \$25,000 to \$100,000, and the number of its directors from four to five.

The Monarch Elevator Co. recently transferred its property at East Grand Forks, Minn., to the newly organized East Grand Fork Farmers' Elevator Co.

The H. C. Timm Co. has been incorporated at New Holstein, Wis., by H. C. Timm, George H. Schroeder and Bertha Schroeder, with a capital stock of \$30,000.

The Cereal Grading Co. has been incorporated at Minneapolis, Minn., by George O. Eddy, George P. Stout and Henning A. Blomgren, with a capital stock of \$15,000.

J. L. Tracy has sold his interest in the firm of Brown & Tracy at Minneapolis, Minn. T. R. Knight will take Mr. Tracy's place and the firm will continue under the same name.

The Armour Grain Co., of Chicago, has leased elevator E, at Milwaukee, Wis., from the C. M. & St. P. R. R. Co. The elevator, which has a capacity of 1,000,000 bushels, was formerly operated by the Milwaukee Elevator Co., the Milwaukee branch

of the Armour Co., but for the past year has been closed for repairs.

The Farmers' Elevator Co. has purchased the Minnesota & Northern Elevator at Fosston, Minn., and will open it in time for the new crop, after making a number of repairs.

The Stanton Farmers' Elevator Co., of Stanton, Wis., has been incorporated by Charles A. Albert, John Gerity, William M. McNamara and others, with a capital stock of \$5,000.

The Elbow Lake Farmers' Independent Elevator Co. was recently incorporated with a capital stock of \$10,000, at Elbow Lake, Minn. Ole A. Pikop is president, and C. A. Anderson, secretary.

The Milwaukee Elevator Co. of Milwaukee, Wis., is making extensive repairs on its line of grain elevators through Wisconsin and Minnesota. The Burrell Engineering & Construction Co. has the work in charge.

The Farmers' Co-operative Elevator Co., of Hokah, Minn., was recently organized. The officers are A. J. Von Arx, president, and Fred Pilger, secretary. A paid-up capital stock of \$3,500 is required before the company will open for business.

The firm of Larson & Swanson, which has been established for thirty years, and of which the headquarters are at Stockholm, Minn., was dissolved recently. Under the new management Mr. Larson retains the grain business at Stockholm, Pepin, and Maiden Rock, which he will operate under the name of M. Larson & Sons. Mr. Swanson takes over the grain business at Hager and Bay City, the livery business at Stockholm, as well as the mercantile business at that place. His firm will be known as C. J. Swanson & Co.

WESTERN.

T. A. Kvindlog is erecting an elevator at Willow Creek, Mont.

A 20,000-bushel elevator has been completed at Wagner, Mont.

The Royal Milling Co. will probably erect a grain elevator at Eureka, Mont.

The Denver Elevator Co. is building an addition to its warehouse at Denver, Colo.

The new elevator at Dennis, Mont., was opened for business about September 6.

The 30,000-bushel Montana Central Elevator at Valier, Mont., has been completed.

The Farmers' Elevator Co., at Moccasin, Mont., shipped its first car of wheat on August 28.

A large flat house for handling grain is being built at Ravine, Mont., by E. W. Radford.

C. H. Sowle, of Culbertson, Mont., has sold his elevator at McCabe, Mont., to the H. Poehler Co.

The farmers in the vicinity of Murray, Utah, are considering the erection of an elevator at that place.

William O'Laughlin has leased some ground and will erect an elevator at Mildred, Mont., in the near future.

The Montana & Dakota Elevator Co. will begin work on a new elevator at Wolf Point, Mont., as soon as the material arrives.

A movement has been started to organize a farmers' protective association which will probably erect an elevator at Courad, Mont.

It is reported that the Kerr-Gifford Grain Co., of Portland, Ore., has taken over the warehouse of Ertel & Torrence at American Falls, Idaho.

The National Grain & Feed Co., of Spokane, Wash., was recently incorporated with a capital stock of \$25,000, by A. A. Rutter, Fred Sly and others.

Work has been commenced on the grain elevator at Cut Bank, Mont., which the McCabe Brothers, of Duluth, are erecting. The interior fixtures have already arrived.

The J. C. Kinney Elevator at Wibaux, Mont., which was recently purchased by J. Burns, is being put in readiness for the fall rush. W. D. McKinnon will be buyer.

The Lytle Elevator Co., of Miles City, Mont., has been incorporated with a capital stock of \$75,000, \$50,000 of which is now paid in. The incorporators are D. L. Lytle, F. J. Lytle and A. H. Lytle.

The Western Lumber & Grain Co., at a recent meeting held in Lewiston, Mont., decided to erect two grain elevators, one at Hilger, and the other at Colver's. Each house is to have a capacity of 40,000 bushels.

In addition to the three elevators of the Rocky Mountain Elevator Co., now being erected at Broadview, Belmont and Hedgesville, Mont., three others are to be erected, one at Wayne, one at Power, and one probably at Judith Gap.

The Fisher Flouring Mills Co. has purchased about 400 feet of frontage on the inner harbor at the port of Los Angeles, Cal., on which it intends to erect a huge elevator and storage sheds. The

land is valued at \$100,000 and the improvements \$200,000.

L. Norberg and J. H. Lyons, both of Coeur d'Alene, Idaho, have formed a partnership and will engage in the grain, flour and feed business.

EASTERN.

Elmer Barton recently sold his grain business at Brownville, Me., to Percy Ryder.

C. E. Metzler has purchased the Old Clover Leaf Grain Elevator at Birmingham, N. Y., and will remodel it for winter storage.

The Cutler Co., of Wilbraham, Mass., is negotiating for the purchase of the grain and feed store of W. G. Davis, at Westfield, Mass.

A new concrete elevating tower is being erected on the Frontier Elevator at Buffalo, N. Y., by the Washburn-Crosby Milling Company.

The A. H. Traphagen Co., of Waterloo, N. Y., has been incorporated by Almon H. Traphagen, George F. Bodine and James H. Traphagen, all of Waterloo.

The M. F. Walker Co., of Naples, N. Y., has been incorporated with a capital stock of \$50,000. The directors are Albert D. Hatch, Maurice F. Walker and Bertha E. Walker.

The Interstate Cereal Co. was recently incorporated at Dover, Del., by Frank Hendrick, John B. G. Rinehart and Louis Michaels, of New York City, with a capital stock of \$300,000.

The work of putting new foundations under the three tanks of the Great Eastern Elevator at Buffalo, N. Y., has been completed. The tanks are 80 feet high, and have an interior diameter of 55 feet. Each has a capacity of 160,000 bushels.

The Pennsylvania Railroad will probably build a 1,000,000-bushel elevator at Greenwich Point, Philadelphia, Pa., instead of Girard Point, as was rumored. The company's elevator at Girard Point will be dismantled and used as a station for iron ore and scrap iron.

The new million-bushel concrete elevator of Spencer, Kellogg & Sons, at Buffalo, N. Y., has been completed. The structure contains twenty large bins with a capacity of 40,000 bushels of grain each, and twenty-eight small bins each holding between 5,000 and 10,000 bushels. The house is operated by electricity, seventeen motors being used. The structure, which has been in the course of construction for nearly two years, will cost \$253,000.

IOWA.

The Roush Elevator at Onawa, Iowa, has been completed.

A. C. Croft will rebuild his elevator at Centerville, Iowa.

Work has been started on the new elevator at Schaller, Iowa.

Work on the new elevator at Altoona, Iowa, is progressing rapidly.

The Germania Grain & Stock Co., of Germania, Iowa, has been dissolved.

The farmers will probably erect an elevator at Center Point, Iowa, this fall.

A 125,000-bushel elevator will be erected by the Cavers Elevator Co. at Council Bluffs, Iowa.

A gasoline engine has been purchased for the Farmers' Elevator Co., at Bridgeway, Iowa.

Mr. Mast has purchased an elevator at Iowa Falls, Iowa, and Worth Williams will operate it.

Anderson & Stockdale have dissolved their partnership in the grain business at Estherville, Iowa.

The Farmers' Elevator Co., of Merrill, Iowa, has decided to put in a series of houses and a stock of coal.

B. F. Stoddard & Co. will equip their elevator at Sloan, Iowa, with two Hall Signaling Grain Distributors.

The Doud Milling Co. has equipped its elevator at Manning, Iowa, with two Hall Signaling Grain Distributors.

The elevator at Pilot Mound, Iowa, has been sold to the Western Elevator Co. by the Reliance Elevator Co.

A Hall Signaling Grain Distributor will be installed in the elevator of the Plymouth Milling Co. at Merrill, Iowa.

E. E. Hayes & Sons have obtained a lease from the railroad company permitting them to erect a new granary at Mount Ayr, Iowa.

The Beal-Vincent Grain Co., of Omaha, Nebr., has leased the elevator of A. Mickel at Atlantic, Iowa, and opened for business September 1.

A co-operative company has been formed by the farmers residing about seven miles north of Osage, Iowa, for the purpose of doing a grain and coal business. The company has a capital stock of \$3,000, and is officered as follows: William Allison, president, and C. E. Bucknam, secretary.

Work on the elevator has been commenced. The Chicago Great Western has put in several hundred feet of side track.

The Farmers' Grain and Stock Co., of Carpenter, Iowa, has been incorporated with a capital stock of \$10,000, by Adolph Stehn, Elling Ellingsworth, Sam Severson, E. G. Nelson and Anton Larson.

The Atlantic Mill & Elevator Co. recently commenced the erection of a new elevator at Marker, Iowa, eight miles south of Atlantic on the A. N. & S. The elevator will have a capacity of 5,000 bushels.

The Farmers' Co-operative Elevator Co. has been incorporated at Northwood, Iowa, with a capital stock of \$25,000. The officers of the company are H. L. Olson, president; A. C. Lunberg, secretary, and O. H. Thompson, treasurer.

OHIO, INDIANA AND MICHIGAN.

The M. E. Frazier Co. is erecting an elevator at Boneta, Ohio.

It is proposed to build an elevator at Larwill, Ind., by the farmers of that region.

The Gardner Elevator at Frank, Ohio, has been completed and is ready for business.

Syler Brothers of Ankeneytown have purchased the McAninch Elevator at Climax, Ohio.

Waller & Co., grain dealers of Henderson, Ky., intend to build an elevator at Johnson, Ind.

The Bad Axe Grain Co., of Bad Axe, Mich., has increased its capital stock from \$20,000 to \$100,000.

John Morgan recently purchased the elevator of B. F. Winters at Lyons, Ind., for a consideration of \$6,000.

The farmers in the vicinity of Idaville, Ind., have formed a company and will build an elevator at that place.

The Farm Produce Co. will install a Hall Signaling Grain Distributor in its elevator at Cass City, Mich.

An elevator will be erected at Knightstown, Ind., by a company of farmers headed by A. E. Carroll and R. C. Morgan.

The elevator belonging to Risser & Good at Jenera, Ohio, will be equipped with a Hall Signaling Grain Distributor.

The Farmers Grain and Supply Co. has purchased some property at Camden, Ohio, where it will erect a modern elevator.

A new roof is being put on the Lowe Elevator at Monticello, Ind., by the Loughry Milling & Grain Co., lessees of the house.

The C. E. Sears Canning Company, of Circleville, Ohio, will erect a 50,000-bushel elevator at that place for the purpose of storing corn.

The Fairland Grain Co. has been incorporated at Fairland, Ind., by N. C. Williams, C. T. Fraker and F. I. Imel, with a capital stock of \$18,000.

E. A. Allen of South Henderson, Ohio, has ordered a set of plans of the Burrell Engineering & Construction Co. for a new elevator at Octa, Ohio.

A new elevator will be built at Middletown, Ind., in time for the new corn crop. Al Fattic, of Mechanicsburg, and George Lewis, of Anderson, are the promoters.

S. J. Swain, of Worcester, Ohio, has purchased the grain elevator at Medina, Ohio, for \$4,500. The Wood Co. will continue to do business at its plant at the B. & O. depot.

F. B. Close & Co. are building an elevator at Byron, Mich., to replace the one burned last fall. A sum of \$35,000 was paid by the railroad for the burning of the other house.

The Forest Hill Elevator Co., of Forest Hill, Mich., has been incorporated with a capital stock of \$15,000. Otis A. Post is president, and Elmer A. Post secretary and treasurer.

The Burrell Engineering & Construction Co. is doing repair work on the elevator of the Bad Axe Grain Co. at Bad Axe, Mich. They are also building a new bean house for the same company.

The elevator of the Evansville Storage Co., of Evansville, Ind., recently underwent some extensive improvements. A new switch has been laid to the plant, and its capacity has been doubled.

McAllister & O'Connor have the contract of the Union Grain & Coal Co., of Edgerton, Ind., for a new 40,000-bushel elevator. The Philip Smith Mfg. Co., of Sidney, Ohio, will supply the machinery.

The Harrisville Milling Co. of Harrisville, Mich., is building a new grain and bean elevator at Gustin, Mich. The capacity is 25,000 bushels. The Burrell Engineering & Construction Co. have the contract.

The Raymond P. Lipe Elevator and the West Side Elevator, at Sherwood, Ohio, owned by Fred Kalmbach, were recently purchased by William Hirzel, of Hicksville, and J. J. Thieroff, of Sherwood, who will conduct the business under the name of the Maumic Valley Grain Co. Mr. Thieroff will be manager. Each house will be run sep-

arately by its old employes. A hay barn is to be erected in connection with the plant.

Ben C. Thomas, whose grain elevator at Columbus, Ind., burned some time ago with a loss of \$70,000, will convert the abandoned cerealine mill at that place into an elevator with a capacity of 100,000 bushels.

The Egly-Doan Elevator Co., of Fort Wayne, Ind., has been incorporated with a capital stock of \$50,000, by C. G. Egly, M. M. Doan, C. C. Springer, T. A. Doan, F. Greenwell, Joseph Witmer, and D. L. Shalley.

The Farmers' Elevator Co., of Monticello, Ind., has been incorporated with a capital stock of \$12,000, by M. B. Spencer, D. Dilling, J. C. Hutton, W. M. Reynolds, John D. Fowler, E. O. Christy and Bart Holmes.

A 60,000-bushel storage space in the form of a new concrete tank will be added by the Northwestern Elevator & Mill Co. to its mill at Toledo, Ohio. This will give the company a total storage capacity of 260,000 bushels at Toledo.

The Fairland Grain Co., of Fairland, Ind., has purchased the elevators at Boggsstown, Fairland and London, Ind., from the Nading Mill and Grain Co., for a consideration of \$25,000. The Nading Co. still owns elevators at Waldron, St. Paul, Lewis Creek, Prescott and Fenns.

A 75,000-bushel elevator will be erected at Fort Wayne, Ind., by the newly incorporated Egly-Doan Elevator Co. The house will be 130 feet high, and 36x42 feet. It will be operated by nine electric motors, and will be used as a transfer and terminal house, as well as for local farmers.

The West Side Iron Elevator, Toledo, Ohio, has been sold by the First National Bank to the American Food and Cattle Co., for \$2,000. The plant was formerly used by the Toledo Salvage Co., in connection with its establishment on the East Side. It has a capacity of 2,000,000 bushels. The consideration was \$2,000.

The Burrell Engineering & Construction Co. has the contract for the erection of a 30,000-bushel elevator for the Farmers' Grain Co. at Kinde, Mich. It will be equipped with a Fairbanks 20-horsepower Gasoline Engine, a line of A. T. Ferrell & Co.'s bean machinery and Monitor Cleaners. It will be of crib construction, ironclad.

MISSOURI, KANSAS AND NEBRASKA.

The new elevator at Plevna, Kan., has been completed.

Poor & Knight are building a concrete elevator at Chapman, Kan.

The big addition to the Elliott & Myers Elevator at Superior, Nebr., has been completed.

A new scale is being installed in the elevator of the Roberts Elevator Co. at Blair, Nebr.

F. P. Hawthorne, of Hutchinson, Kan., will build a 10,000-bushel elevator at Elyria, Kan.

Charles A. Millar has purchased the Dowling & Purcell Co.'s elevator at North Bend, Nebr.

The T. B. Hord Grain Co. at Genoa, Nebr., has purchased a Hall Signaling Grain Distributor.

The elevator at St. Mary, Nebr., has been purchased by the Lincoln Grain Co., of Lincoln, Nebr.

The Updike Grain Co. has installed two Hall Signaling Grain Distributors in its elevator at Friend, Nebr.

The Updike Grain Co. will equip its elevator at Cordova, Nebr., with a Hall Signaling Grain Distributor.

The old Kendall & Smith Mill, at Woodlawn, Nebr., is being remodeled and turned into a grain elevator.

A 20,000-bushel elevator is being erected at Nowata, Kan., by the Rea-Patterson Milling Co., of Coffeyville, Kan.

The elevator and mill at Bruning, Nebr., has been purchased by E. C. Carter, of the Beaver City Mills, at Beaver City.

The elevator of the Concordia Mill & Elevator Co., at Concordia, Mo., will be moved nearer the company's mill.

The business, at Lincoln, Nebr., of the Ware & Leland Co., of Chicago, Ill., has been taken over by the Lincoln Grain Co.

The Tomlin Grain Co., of Kansas City, Mo., has been incorporated with a capital stock of \$15,000, by John R. Tomlin, E. T. Tomlin and W. H. England.

A 65,000-bushel reinforced concrete elevator was recently completed at Bellefont, Kan., by the Wheat Belt Grain Co. The company has contracted for a 75,000-bushel plant at Spearville, Kan., and recently built one at Wright.

The Trans-Mississippi Grain Co., of Omaha, Nebr., is erecting a new elevator beside its present structure in Council Bluffs, Iowa. The new house will have a storage capacity of 300,000 bushels, and will be 42x126 feet in ground dimensions, and between 85 and 90 feet high. Moulton & Evans, of

Minneapolis, have the contract. The cost will be between \$30,000 and \$35,000.

THE DAKOTAS.

An elevator is being erected at Dennis, N. D.

A new elevator will be erected at Alfred, N. D.

The Farmers' Elevator at Redfield, S. D., has been completed.

Ed. L. Saxton intends to erect a 40,000-bushel elevator at Upham, N. D.

George Lilly recently opened up the Farmers' Elevator at Rolette, N. D.

The gasoline engine in the elevator at Hannaford, N. D., was recently repaired.

The St. Anthony & Dakota Elevator at Willow City, N. D., has been repaired.

A 40,000-bushel elevator will be erected at Upham, N. D., by E. L. Saxton.

The White House Elevator, at Denbigh, N. D., has been thoroughly overhauled.

A. E. Ireland & Co. have leased the Osborne-McMillan Elevator at Carrington, N. D.

Charles Bready has purchased the Minneapolis & Northern Elevator at Mohall, N. D.

C. C. Honey and George McLean have purchased the M. & N. Elevator at Edmore, N. D.

A large steel elevator has been erected on the farm of Frank Linha, north of Minot, N. D.

D. I. McHugh will operate the Imperial Elevator at Dunseith, N. D., for the current season.

Wait & Dana have purchased one of the elevators at Plankinton, S. D., and put it in operation.

The Atlantic Elevator at Adams, N. D., will open up this fall and Commissioner Lofthus will be in charge.

A 10-horsepower motor has been installed in the plant of the Occident Elevator Co., at Jamestown, N. D.

The elevator being erected on the site of the old farmers' elevator at Des Lacs, N. D., is fast nearing completion.

The Nye-Schneider-Fowler Co. and the Von Seggern Brothers both intend to build an elevator at Colome, S. D.

The Hurdsfield Farmers' Elevator Co., at Hurdsfield, N. D., will either buy or build an elevator in the near future.

The Nye-Schneider-Fowler Co. is building a 20,000-bushel elevator at Winner, S. D., and also a coal and lumber shed.

The Farmers' Elevator at Twin Brooks, S. D., has closed for the season, owing to the lack of grain in that vicinity.

A 30,000-bushel elevator will be erected on the farm of Sturm and Price, near Clyde, N. D. Fred Jahneke has the contract.

D. J. Hennesy has purchased the old Minneapolis & Northern Elevator at Reynolds, N. D., and will conduct a grain business.

Charles R. McCloskey has purchased the Hart-Robinson Elevator at Sentinel Butte, N. D. Cecil Denhart will be manager.

Oscar T. Simons, of Bartlett, N. D., has purchased the elevator at that place known as the Grain Producers' Elevator.

The Dodge Grain Co. has purchased the Acme Elevator at Granville, N. D. Robert Hunter is grain buyer and manager.

The Dakota Grain Co. has purchased the elevator at Gackle, N. D., and will put in a flour house and manufacture all kinds of feed.

An elevator with a capacity of 50,000 bushels will be erected at Luverne, N. D., just east of Sheyenne, by the farmers of that neighborhood.

Through an arrangement made by the Citizens' Bank, of Kenmare, N. D., the Farmers' Elevator Co. will open its house at Norma, N. D.

The Farmers' Equity Union, of which Fred Schoenseigel is secretary, is planning the construction of an elevator at New Leipzig, N. D.

The Farmers' Equity Elevator Co. has been formed by farmers around Warwick, N. D. The capital stock is \$10,000, with shares at \$25 each.

The Occident Elevator at Bowbells, N. D., which was closed down eighteen months ago, has been reopened under the management of A. J. Carter.

The Crary Farmers' Elevator Co., of Crary, N. D., has been incorporated by D. C. McLeod, D. W. Hunter and M. R. McLeod, with a capital stock of \$5,000.

Many improvements have been recently made on the Farmers' Elevator at Hartford, S. D., including the enlarging of the pit and also the office and twine room.

The Mapleton Farmers' Elevator Co. was recently incorporated at Mapleton, N. D. The incorporators were Treadwell Twichell, Mark Andrews

and A. L. McKinnon, all of Mapleton. The capital stock is \$10,000.

The elevator of the H. W. Schneider Elevator Co. at Salem, S. D., was recently purchased by a stock company composed of a number of people of that place.

The Sharon Elevator & Milling Co., of Sharon, N. D., has been incorporated with a capital stock of \$50,000, by Alexander Curry, L. K. Bakken and Ole T. Bently.

The Russell-Miller Milling Co. has leased P. P. Person's elevator at Valley City, N. D., and is overhauling it. The house will be used for storing Macaroni Wheat.

James G. Brady is erecting a small elevator at the Sennett Siding, five miles east of Olmstead, N. D., on the Soo Line. He was formerly grain buyer at Olmstead.

The Bartlett Independent Elevator Co., of Bartlett, N. D., has been incorporated with a capital of \$10,000, by M. Foley, T. J. Foley and A. M. Peppon, all of Bartlett.

The newly organized Farmers' Elevator Co., at Tyndall, S. D., has purchased the elevator of Charles Felton. Charles Bixby has been elected secretary and treasurer.

J. Burns, who recently purchased the J. C. Kinney Elevator at Wibaux, N. D., has put the elevator in readiness for the fall trade. W. O. Kinnon, of Fowler, Mont., is grain buyer.

The Farmers' Elevator Co., of Simcoe, N. D., has been incorporated with a capital stock of \$10,000, by Elmer W. Fromahder, of Granville, N. D., and Tom Hystad and Karl Grindberg.

A 30,000-bushel elevator is being built at Nash, N. D., by the St. Anthony & Dakota Elevator Co. The house will be operated by an 8-horsepower engine. L. O. Hickok & Son are doing the work.

The capital stock of the newly incorporated Farmers' Elevator and Trading Co., of Battleview, N. D., is \$10,000. H. C. Thronson, F. O. Anderson and Andrew Johnson are the incorporators.

Charles H. Roth, John Rothelsburger and Martin Dahl have incorporated the Farmers' Elevator Co., at Huff, N. D. The capital stock is \$120,000. An elevator will be built in time for this season's crop.

The Equity Elevator & Trading Co., of Brocket, N. D., was recently incorporated with a capital stock of \$25,000, by Ray Cunningham, P. H. Kelly, A. V. Gardner, P. O. Evey and J. D. Robinson, all of Brocket.

CANADIAN.

An elevator will soon be erected at Dugald, Man.

The Atlas Elevator Co. has built an elevator at Lebret, Alta.

An elevator will be built at Irvine, Alta., by the Medicine Hat Milling Co.

Moses & Hackman are building an elevator at Ardath, Sask.

An elevator is being erected at Bow Island, Alta., by the Taylor Mill & Elevator Co., Ltd.

The Alberta Pacific Elevator Co. has begun the erection of a large elevator at Brooks, Alta.

The Board of Trade at Beiserker, Alta., is desirous of having an elevator erected at that place.

The elevator, No. 129, being erected by the Ogilvie Milling Co., at Hazelridge, Man., has been practically completed.

Negotiations are being carried on by the Co-operative Elevator Co. for the purchase of the Scott Elevator at Jasmin, Sask.

A. McMichael will build an addition to his elevator at Beatty, Sask., in the near future. It will have a capacity of 20,000 bushels.

A grain elevator will be erected at Toronto, Ont., on the water front, by the Ontario Elevator Co., Ltd., which is being formed at that place.

An elevator will be erected by the Saskatchewan Western Elevator Co. at Morse, Sask. Inducements have been made by the Morse Board of Trade.

A farmers' elevator at Cupar, and two of the International Elevator Co.'s houses at Stockholm and Tantallon, Sask., have been purchased by the Saskatchewan Co-operative Elevator Co. Contracts for four elevators of 40,000 bushels capacity have been let to the Gillespie Construction Co. of Brandon and Haycock & Sons of Minneapolis. Contracts have also been let for other houses.

An addition will be built to the new grain elevator now being constructed by the Montreal Harbour Commission, at Montreal, Que., which will increase the capacity of the plant from 1,772,000 bushels to 2,620,000 bushels. The entire plant will probably be ready by May, 1912. It will be able to handle 40,000 bushels an hour inwards, and 60,000 bushels an hour outwards.

[Special Correspondence.]

GRAIN TRADE NEWS FROM TOLEDO.

BY E. F. BAKER.

There has been a fairly active movement of wheat during the past few days. The National Milling Co. received another cargo of spring wheat from Duluth during the week and two cargoes have been shipped out, one by the Paddock-Hodge Company to Buffalo, and one by Rosebaum Brothers to Montreal. There is no question, however, that business is being seriously hampered here by the lack of proper storage facilities. One prominent grain man said: "I know of about 4,000,000 bushels of corn that have been diverted into other channels within the past two months which would have come to Toledo had elevator facilities been such as to handle it." While there is trading in grain of all kinds all the time, local dealers are frequently compelled to cease buying temporarily, and in many instances consignments have been stopped until arrangements could be made for taking care of them. Despite these handicaps a good business is being done, the total wheat receipts here aggregating 237,000 bushels during the week ending Sept. 9. Shipments during the same period aggregated 198,000 bushels. Storage capacity is taxed to the limit and consignments can be received only as fast as grain is shipped out to make room. Just at present both Eastern and export prices are somewhat out of line, and business is impeded, with added resulting congestion. Arrangements are now under way for the storing of from perhaps 400,000 bushels to 500,000 bushels of wheat during the winter in vessels, to be held in the local harbor. One unusually large vessel of about 350,000 bushels' capacity has been spoken for and will no doubt be secured for the purpose. This will prove of some assistance, at least temporarily and until more storage room of a permanent character can be provided. Local wheat stocks are now estimated at 1,891,982 bushels. Cash wheat is quoted here today, Sept. 11, at 96 cents, Sept. at 96 cents, Dec. at 98½ cents, and May at \$1.04¼. Most all wheat coming has been of exceptionally good quality.

Receipts of oats have been fairly liberal during the past week, amounting to 118,500 bushels as against shipments of 154,900 bushels, leaving an estimated total in stock here of 556,720 bushels. It is noticeable that the quality is not as good as it was earlier in the season. A large proportion of the grain is badly off color as a result of farmers permitting it to stand in the field during heavy fall rains before threshing. There has been a fair Eastern demand, but the volume of trade has been greatly diminished by lack of proper elevator accommodations. Prices hold fairly firm, quotations on cash oats being 45¼ cents, Sept. same, Dec. 48¼ cents, and May 50¾ cents. Farmers and small elevators are disposed to sell in fair volume on the present market and business would no doubt be far more rushing if local grain concerns were in position to take care of the business.

There is practically no corn in storage here, estimates placing the total at about 15,000 bushels. Heavy local consumption has held the supply down, receipts for the week being 70,200 bushels with shipments of only 29,700 bushels. The new crop is now well out of the way of frost, although a week or two more time would do no harm in some sections, and especially where replanting was necessary. A large percentage is already in the shock, and reports from various sources lead to the conclusion that the yield and quality are both likely to fall below earlier estimates. August rains undoubtedly helped some, but Ohio corn will be light. There is still some old corn in first hands but the percentage is light, and farmers are gradually unloading the small amount on hand to make crib room for the new crop. Cash corn is quoted here at 68½ cents, Dec. 64¼ cents and May at 50¾ cents.

A concerted effort is now being made to secure more storage room for grain in Toledo. During the past couple of years storage capacity for grain has decreased nearly 4,000,000 bushels in Toledo by reason of fires and the wrecking of wooden elevators which had become practically useless. The insurance rates on wooden elevators became so burdensome because of fire risk that they could no longer be operated with profit, and were consequently razed. The effect has been felt keenly by dealers who estimate that millions of bushels of grain have gone elsewhere because of lack of elevator capacity this year. Not only this, but demurrage charges have been piled up by railways, it being practically impossible to handle cars under existing conditions in the time limit. To avert further losses and overcome the difficulty in this direction, the matter has been taken up by the Produce Exchange, and it is probable that at least one new large elevator will be erected as a result. J. J. Southworth, F. O. Paddock and David Anderson were appointed a committee to represent the organization in an effort to secure the needed relief. Present plans contemplate the erection of a large elevator on the Toledo Railway & Terminal

Line on the river front, available for both rail and water shipments. A marine leg is included in the plan. An initial storage capacity of not less than 1,000,000 bushels and possibly 2,000,000 bushels will be provided for, and provision made for adding to the capacity as required. With this in view the matter has been taken up with the Terminal Railway, the officials of which are said to look with favor upon the plan. The Terminal being owned and controlled by seven of the belt railroads entering Toledo territory, all of which would be materially benefited by the project, an effort will be made to interest them in the improvement financially. Local grain interests will also probably invest in the proposition. The elevator will be considered in connection with other extensive dock improvements, including provision for the handling of ore and coal on a large scale, and will probably require the investment of several million dollars before all is completed. Many of the mills of this section have recently been using large quantities of spring wheat in putting out certain blends of flour, and the plan evolved, if carried to successful conclusion, will go a long way toward making Toledo one of the principal distributing points for the enormous quantity of spring wheat coming in from the Northwest.

The Northwestern Elevator and Mill Co., is erecting six new tanks at its plant on Lower Summit Street, which will add 60,000 bushels to its storage capacity.

For the first time in many years a cargo of 100,000 bushels of wheat consigned by Rosenbaum Bros., of the C. H. & D., elevators cleared from Toledo recently, directly to Fairport on the east shore of Lake Michigan.

Mrs. Maud Lipe, wife of Raymond C. Lipe, president of the Raymond C. Lipe Hay and Grain Co., of Toledo, died recently at the family residence in Toledo. Although she had been ill for three weeks, her death was unexpected. She is survived by a husband and two daughters.

The elevator owned by Harrison & Johnson at Holgate, O., was recently destroyed by fire. The plant had a capacity of 20,000 bushels and considerable grain was consumed, several cars of corn and rye having been received the day before. The fire is supposed to have originated from a furnace.

Receipts of timothy seed at Toledo during the month of August were the heaviest ever known in that market. Notwithstanding the fact that the crop as a whole is short, 14,300 bags were received during the month and shipments were made of 8,500 bags, leaving on hand a stock of about 6,000 bags.

Toledo mills have been fairly active recently; and while they have not broken any records, they are apparently doing a normal business. The flour output as reported last week was 33,800 barrels, as compared with 43,800 barrels a year ago, 29,000 barrels two years ago, and 32,000 barrels three years ago.

The home of the Toledo Produce Exchange, built in 1878, and later owned by the Produce Exchange Safe Deposit Co., was recently sold to the Fifty Associates Co. The consideration named was \$300,000. For a time at least the organization will continue to occupy its present quarters in the building, although there is talk that later it may be removed to a new structure not yet erected.

A new corporation to be known as The Steel Elevator Co., of Toledo, has been organized with a capital stock of \$50,000. The incorporators are Guy G. Major, Rathbun Fuller, R. D. Logan, H. P. Hackett and E. A. Koster. Negotiations are pending for the purchase of the east side plant formerly owned by the Toledo Salvage Co., and if the deal is successfully terminated the house will be utilized by Major's Linseed Oil Co., for the storage of raw material.

A recent letter from James Webster, assistant freight traffic manager of the Lake Short Lines at Chicago, to David Anderson, president of the Toledo Produce Exchange, announces that the question of a readjustment of freight rates affecting the Toledo grain market is now under consideration and that the outlook is encouraging for a downward revision of the schedules. For years Toledo has insisted that local rates to New York should be reduced thus giving Toledo a fair chance to meet competition of western grain markets.

The Marfield Grain Co. of Minneapolis, Minn., has been incorporated with a capital stock of \$200,000. The incorporators are John R. Marfield, Henry F. Reutner and Holbert E. Bateman. The company succeeds the old Marfield-Pearse Co.

The Burns Grain Company has been organized and commenced business at No. 722 Chamber of Commerce Building, Buffalo, N. Y., on September 1. The firm will do business as a grain, brokerage, commission and merchandising corporation. H. T. Burns is president and Basil Burns is secretary and treasurer. Both the organizers of the company are experienced grain men and well known in the east and among Western shippers of grain.

COMMISSION

J. A. Wilkinson has opened a branch at Asotin, Wash., for the Kerr-Gifford Co. of Lewiston, Idaho.

J. B. Taylor, late of the Taylor-Hunter Co., has organized the J. B. Taylor Co., grain commission, at St. Louis.

C. E. Burgess of Devils Lake, N. D., has opened a grain office at Duluth, Minn., with James Collinson in Chicago.

J. L. Tracy of the grain firm of Brown & Tracy of Minneapolis, Minn., has sold his interest in the firm and will remove to Oregon.

H. S. Kennedy, sometime secretary of the Millers' National Federation, is now in the milling wheat department of the Kemper Grain Co., Kansas City.

Sidney Long & Co. is a new firm to engage in the grain business in the Chicago market. They have established offices at No. 218 The Temple Building.

W. G. McDougal, until recently with the Armour Grain Co. of Chicago, will in the future have charge of the cash grain department of Harper & Ward of Des Moines, Iowa.

Charles C. Rubins, who represented the Peavey Grain Co. of Chicago, Ill., at New York City, until the retirement of that firm, is now New York representative of King, Farman & Co., of Chicago.

Ware & Leland of Chicago have taken over the future department of M. T. Shepherdson Company of Sioux City, Iowa. W. J. Hanagan, who was for four years with the Shepherdson Company, remains as manager for the Chicago firm.

A. Ballentine, who for the past ten years has been manager of the Chamber of Commerce Clearing Association of Milwaukee, Wis., has connected himself with the Glavin Grain Co. Mr. Ballentine is succeeded as manager of the clearing house by E. Graetz.

Edward K. Airy and Floyd Spencer, who have conducted a grain brokerage business at Binghamton, N. Y., have dissolved partnership. Mr. Airy has associated himself with the Empire Grain & Elevator Co. and Mr. Spencer has engaged in business at Nichols, Pa.

The firm of Adolph Kempner Company has been organized to do a general grain commission business on the Chicago Board of Trade. Adolph Kempner is president of the company, George H. Phillips, vice president, James K. Riordan, treasurer, and Alfred F. Gerhart, secretary.

Edward P. Jones, who has been engaged in the grain business at LaFayette, Ind., for the past thirty-five years, has retired from business. He was local representative of Lamson Bros. & Co. of Chicago and has been succeeded by Fred G. Heinmiller. Offices will remain in the Hotel Lehr Block.

J. W. Gordon, recently with S. P. Arnot Co., Chicago, has engaged with Gardiner B. Van Ness, Chicago. Mr. Gordon has had experience both in the grain and milling business, being formerly head of the Gordon Mill & Grain Co. at Lincoln, Ill. He will be connected with the cash grain department of the Chicago firm.

H. H. Petersen has been elected president of the L. Bartlett & Co., Milwaukee, one of the oldest commission houses in that city. Mr. Petersen has been with the company twenty-two years, beginning as stenographer in 1889, and winning promotions as bookkeeper, secretary, vice president, and finally as the head of the concern.

The Standard Grain Co. of Omaha, Neb., has filed articles of incorporation with a capital stock of \$25,000. The incorporators are E. G. Taylor, of Loup City, James Swanick and L. P. Roberts of Omaha. They will have a membership in the Omaha Grain Exchange and will do a general grain receiving and shipping business.

A very useful and attractive novelty was mailed last month to the friends and patrons of Pope-Eckhardt Co., Chicago. It consists of a bronze paper clip and has an embossed representation of golden ears of corn on the top side. It is strongly made, and even if Horace's monument was "more lasting than bronze," yet few grain dealers would exchange it for the paper clip given by this well-known Chicago grain commission house.

In connection with the Chicago Board of Trade expulsion of T. H. Miller, the house of E. W. Wagner & Co., Chicago, makes the following announcement: "The inquiry into wrong pit practices on the part of T. H. Miller was instigated by E. W. Wagner & Co. some four months ago, when complaints of irregularity rendered this action necessary. The directors of the Board of Trade at that time were notified by this house and an inquiry demanded. The house of E. W. Wagner & Co. has never performed a single transaction for account of T. H. Miller—clearing of his entire trades being done through other concerns—and being entirely without any knowledge on the part of E. W. Wagner & Co."

THE EXCHANGES

The J. Rosenbaum Co.'s "B" elevator (formerly Peavey "B") has been made regular at Chicago for grain and flaxseed.

September 1 deliveries of wheat at Minneapolis were only 5,000 bushels—one of the lightest delivery days in years.

The directors of the Chicago Board on Sept. 12 ordered a ballot on the proposed reorganization of the clearing house.

The directors of the St. Louis Merchants' Exchange have rejected a petition to permit grain in cars on track to be delivered on contracts.

E. Graetz has succeeded A. Ballentine as manager of the Milwaukee Chamber of Commerce Clearing House, Mr. Ballentine having gone into business.

The Chicago Board of Trade has expelled Thos. H. Miller, Jr., a member for twenty years, on a charge of uncommercial conduct, the specific charge being "skinning trades."

The directors of the Chicago Board of Trade have changed the hours of trading in insurance indemnities to 1:45 to 2:30 p. m. daily, except Saturday, when they will be 12:15 to 12:45 p. m.

Sec'y Geo. H. Morgan has published a new edition of the Rules, By-Laws, Regulations, etc., of the St. Louis Merchants' Exchange in force August 1, 1911. It is admirably edited and exhaustively indexed for convenient use.

The St. Louis Merchants' Exchange directory has appointed John L. Messmore and E. M. Flesh members of a committee to co-operate with committees of the exchanges which belong to the Council of Grain Exchanges to formulate uniform rules, using as a basis the rules of the Chicago Board of Trade.

The Chicago Board of Trade has ruled that continuous market quotations may not be transmitted by telephone. This rule was made because it was said that certain members, having the quotations flashed to them ahead of the ticker were able to make profits by beating the market into the Open Board of Trade. This rule is not to interfere with the quotations necessary in conversations regarding the making of trades.

The arbitration committee of the Chicago Board of Trade has refused to support a claim of \$86,000 filed by the creditors of the Peavey Grain Co. against Horace Jackson. The chairman of the committee, James F. Fores, said the claim was thrown out "because it was all lost on one individual trade which the evidence did not appear to show as belonging to Jackson individually. The presumption of the committee was that the execution of so big an order was probably not for Jackson, who was in the employ of the concern, but for the head of the house which was back of the trade. The committee felt that if Jackson made any such trade as that the house would have promptly called him to account at the time." Mr. Jackson has since made settlement on private terms.

RECEIPTS MUST BE REGISTERED.

The Illinois Railroad and Warehouse Commission, by O. F. Barry, chairman, has issued the following ruling:

"It has been brought to the notice of the Commission that frequently grain elevator owners or lessees deliver warehouse receipts to the owner before registration, expecting him to have the same registered. Warehouse receipts should not go into circulation until they are registered in the Registrar's office of this department.

"It is therefore ordered by the Commission that all elevator owners, lessees, and persons issuing warehouse receipts shall stamp upon each receipt when issued, in bold letters, the following:

"This receipt is not negotiable unless registered with the Registrar of the Illinois Grain department of the Railroad and Warehouse Commission." And all such owners and lessees are hereby directed to stamp the words above named on each certificate before delivering the same."

MEMBERS AT MEMPHIS.

This editor is indebted to Sec'y N. S. Graves for a list of members of the Memphis Exchange, revised to September 1, as follows:

S. M. Bray & Co., W. P. Brown & Co., E. C. Buchanan & Co., R. B. Buchanan & Co., E. E. Buxton, Cherokee Commission Co., Clark, Burkle & Co., C. P. Cook, Crump Brothers & Cook, C. A. Dammann & Co., Davis & Andrews Co., Denyven & Co., Edgar-Morgan Co., Farabee-Treadwell Co., H. J. Hasenwinkle Co., J. B. Horton & Co., Jones & Rogers, Lee D. Jones, McLaughlin Coal & Grain Co., W. D. Moon & Co., G. E. Patteson & Co., Pease & Dwyer Co., Rainer, Connell & McFadden, Roberts-Hammer Grain Co., Scruggs, Robinson & Co., Shanks, Phillips & Co., Trenholm-Kolp Co., J. E. Tate & Co., John Wade & Sons, Webb & Maury, E. W. Wyatt, J. M. Williams & Co., Yates-Donelson Co.; Jackett & Anderson, Covington, Tenn.; Pat-

ton-Hartfield Co., Jackson, Miss., and Rogers Grain Co., Chicago, Ill.

NEW COMMISSION RULE.

Sec'y Macdonald reports that the following addition to the commission rule of the Duluth Board of Trade has been made:

"For receiving and selling by vessels, or for buying and shipping by vessels: Wheat, rye, barley and flaxseed, $\frac{1}{2}$ cent per bushel; corn and oats, $\frac{1}{4}$ cent per bushel.

EDGAR H. EVANS.

Edgar H. Evans, president of the Indianapolis Board of Trade for the current year, a year or two ago succeeded his father as president of the Acme-Evans Co., one of the largest winter wheat milling companies in this country.

Mr. Evans was born at Saratoga Springs, N. Y., in 1870; was educated at Indianapolis and Wabash College, and on graduating therefrom in 1892, entered the milling business, of which his father, the late Geo. T. Evans, had long been a prominent member in the winter wheat district. When the firm of



EDGAR H. EVANS.

Geo. T. Evans & Son was, in 1909, merged with the Acme Milling Co., Mr. Evans became treasurer of the Acme-Evans Co.

Mr. Evans is an active worker in all organizations designed to promote the grain and milling industries of the country; he was one of the organizers of the Millers' National Federation, serving as a director for four years, and is now vice-president of the Indiana Millers' Association. He is a director of the Indianapolis Elevator Co., of Indianapolis, and was vice-president of the Indianapolis Board of Trade until made president at the last annual election. He is a member of several clubs, among them the University Club, Country Club, and Commercial Club, and is officially connected with various religious and charitable institutions of Indianapolis.

CHANGES IN EXCHANGE MEMBERSHIPS.

Baltimore.—Sec'y Hessong reports the following new members of the Baltimore Chamber of Commerce admitted during August: Clarence Cottman, Daniel Baker, Thos. H. Roberts and Lewis Dill. There were no transfers.

Chicago.—Sec'y. Geo. F. Stone reports the following change in membership of the Chicago Board of Trade during August, 1911. New members—Edwin O. Moffatt, Chas. Goldstein, Stephen W. Wilder, Walter A. Scott, Jas. L. Laidlaw, Hugh L. Rodgers, Frank Luckman, Chas. Griffin, Chas. G. Curtiss. Transferred members—C. B. Caldwell, John W. Snyder, L. B. Roland, Rufus F. Brett, Frank J. Magin, John L. Tracy, Dwight E. S. Mead, Jacob Hey, Fredk. B. Wells.

Duluth.—Sec'y Macdonald reports that during the month of August Geo. H. Heising, of Minneapolis, withdrew from membership in the Duluth Board of Trade, and Mr. Geo. K. Labatt, of Minneapolis, was admitted to membership.

Kansas City.—Sec'y Bigelow reports the following changes in membership of the Kansas City Board of Trade during August: C. C. Andrews, admitted on transfer from J. Pettit, deceased; F. M. Corbin, admitted on transfer from Perry C. Smith.

Milwaukee.—Sec'y Plumb reports the following

changes occurring in the membership of the Milwaukee Chamber of Commerce during the month of August: New Member—Herbert S. Jewell. Transferred Memberships—David T. Finnie, William D. Sawyer, James Pettit, deceased.

Minneapolis.—Ass't Sec'y E. S. Hughes reports the following new members of the Minneapolis Chamber of Commerce admitted during August: Charles C. Zinn, E. D. Bowen, Jr., Clyde E. Eggleston, Paul C. Rutherford, Ole F. Olson, H. J. Hall, Edwin J. L. Judd, Wilbur B. Joyce, Thornton W. Hall.

St. Louis.—Sec'y Morgan reports the following changes in membership of the St. Louis Merchants' Exchange during August: New members—Henry H. Allen, of Bemis Bros. Bag Co., St. Louis; R. J. House, grain, Kansas City; Louis M. Shepardson, contracting agent Illinois Central R. R., St. Louis. Transferred—Thos J. McLemore, Edgar O. Bragg and N. L. Massa.

San Francisco.—Sec'y Friedlander reports that the following were elected to membership in the San Francisco Merchants' Exchange during the month of August: A. F. Thane, A. F. Thane & Co., to succeed W. H. Davis; and J. C. Ewing, W. G. Stafford & Co., to succeed H. V. Macdonald.

Toledo.—Sec'y Ganaway reports that Geo. D. Woodman, representing Rosenbaum Bros., Chicago, has been elected to membership in the Toledo Produce Exchange.

CROP IMPROVEMENT COMMITTEES.

The following are the names of the various crop improvement committees which have been appointed by the terminal markets, members of the Council, to co-operate with the Crop Improvement Committee of the Council of Grain Exchanges. These committees were appointed in accordance with a resolution adopted at the last meeting of the Council, and are as follows:

Baltimore Chamber of Commerce—J. Collin Vincent, Jas. T. Clendenin, Paul Frame.

Chicago Board of Trade—J. C. Murray, C. B. Pierce, Theodore Cunningham.

Duluth Board of Trade—C. F. Macdonald, W. J. McCabe, T. H. Hagen.

Kansas City Board of Trade—C. W. Lonsdale, Geo. A. Aylsworth, Oliver Denton.

Milwaukee Chamber of Commerce—P. P. Donahue, Carl E. Hansen, W. A. Hottensen.

Minneapolis Chamber of Commerce—J. R. Marfield, J. L. McCaull, C. A. Magnuson.

Agricultural College of Minnesota—Dean Woods and Prof. Andrew Boss.

New York Produce Exchange—L. W. Forbell, Edward Beatty.

Omaha Grain Exchange—E. A. Cope, E. S. Westbrook, Frank H. Morgan.

St. Louis Merchants' Exchange—N. L. Moffitt, E. C. Andrews, Manning W. Cochrane.

Toledo Produce Exchange—Fred Mayer, H. L. Coemann, E. H. Culver.

WABASH DISCRIMINATION ENDED.

The matter of discrimination on Wabash grain by bidders from Buffalo, N. Y., has been discontinued. This is another evidence of the ability of the associated shippers to benefit themselves in relation to the rules of terminal markets.

This discrimination was assessed on shippers along the Wabash Railroad in Illinois to offset an outbound switching charge of \$2.10 on certain elevators located on Buffalo Creek in the city of Buffalo. No Illinois shipper has been found who could explain why a discrimination of $\frac{1}{4}$ cent on oats, making \$3.75 a car, and $\frac{1}{2}$ cent on corn, making \$6 a car, should be exacted to meet a switching charge on grain forwarded from Buffalo to the east of \$2.10 per car.

Secretary Strong of the Association, during the convention at Bloomington, got a number of Wabash shippers in Illinois and some Buffalo receivers and representatives of the Wabash Railroad into a conference, and they adopted a resolution asking the Buffalo Corn Exchange to abolish the discrimination.

The matter was taken up by Secretary Strong by correspondence; and later, on August 29, a further conference was had at Decatur, at which were present Mr. George E. Pierce of Buffalo, Mr. W. T. Bowls of Springfield, representing the Wabash Railroad Co., and a committee representing the Illinois Grain Dealers' Association. The matter was thoroughly discussed, and President Metcalf instructed Secretary Strong to notify the receivers in Buffalo that the discrimination must be discontinued or he would call a meeting of the shippers along the Wabash to make a public protest against the penalization of Illinois shippers of grain to pay an outbound switching charge from Buffalo.

In answer to this a request was made by certain Buffalo receivers, asking that the matter be held over without further action by the Association until October, believing that by that time they could succeed in having the discrimination stopped, and the Association's committee made the concession. However, Wabash shippers are now reporting that they receive bids from Buffalo without discriminations or exceptions.

ASSOCIATIONS

E. J. Smiley has just published a new directory of the regular grain dealers of Kansas, corrected to Sept. 1.

Sec'y Gibbs reports the failure of the special committee on telephone and telegraph company regulation to obtain any legislation at the late session of the Texas legislature, as the session was devoted almost exclusively to party politics to the exclusion of needed legislation.

A meeting of Illinois dealers was held at Macomb on August 17. Those present were Sec'y Strong, Geo. Cole, Mr. Long, both of Bushnell; Geo. Munsen, Scott Howard, Frank Hunter, Macomb; Samuel Hoar, Colchester; Perry Williams, Colmar; C. E. Dawkins, Augusta; A. W. Ford, Scottsburg.

President Goodrich of the National Hay Association has appointed the following delegates and alternates to National Conservation Congress to be held at Kansas City, Mo., on September 25, 26 and 27: Delegates—E. H. Rich, Ledyard, Iowa; T. H. Bunch, Little Rock, Ark., and G. S. Loftus, St. Paul, Minn. Alternates—H. S. Grimes, Portsmouth, Ohio; G. W. Voris, Stewardson, Ill., and C. S. Bash, Fort Wayne, Ind.

The Indiana Grain Dealers' Association, in conjunction with the Department of Agricultural Extension, Purdue University, under the supervision of Prof. George I. Christie, superintendent, has undertaken to assist in the betterment of conditions in wheat growing in some parts of the State, by combatting smut, onions, etc., and for the purpose of starting this work held public meetings at Evansville on Sept. 13 and at Vincennes on Sept. 14. The increase in that state of smutty wheat and wild onions has made this work imperative at this time, if the wheat growers and dealers of the state are to be protected from heavy loss in the future from those causes.

Sec'y Gibbs of the Texas Association reports Thomas & Neely of Celeste, L. L. Sellers of Panhandle, Robert Nicholson of Dallas, and Nelson & Palm of Claude, Texas, admitted to membership, and R. H. Smellage of Whitewright and C. McD. Robinson of Galveston, resigned. In explanation Mr. Gibbs says: Mr. Smellage retires from the grain business, and will devote his entire time to the cotton business. Mr. Robinson, who is the chief grain inspector at Galveston, retires for the reason that there has been no export business in Texas grain for a long time. He is not actively engaged as a grain dealer, and his connection with the Association for several years has been purely complimentary to the Association. He advises that if Texas grain should in future find its way to Galveston for export, he will cheerfully renew his membership. I am sure that all our members appreciate his friendly feeling towards the Association, and fully understand his reasons for resigning."

Sec'y J. Vining Taylor reports the following as new members of the National Hay Association received since previous reports: Carlisle Commission Co., Kansas City, Mo.; North Brothers, Kansas City, Mo.; Thomas Costello, Merrifield, N. Y.; Machen Bros., Galesburg, Ill.; J. W. Karnes & Son, Galatia, Ill.; Burt H. Winchester, Newark, N. J.; J. L. Shultz & Co., Skaneateles, N. Y.; L. E. Gardner, Lorain, O.; Clark & Brown Hay Co., New York; Richmond Elevator Co., Richmond, Mich.; B. F. Tyler Commission Co., Kansas City, Mo.; Van Order Hay Co., Pompton Lakes, N. J.; Cyrus F. Dyer & Sons, Wilkes-Barre, Pa.; Huffine & Co., Kansas City, Mo.; F. A. Halesberry & Co., Elkins, W. Va.; Martin Mullally, Emmett, Mich.; Savoy Brokerage Co., Norfolk, Va.; R. B. Zehner, Dunkirk, O.; L. S. Russell, Cardington, O.; L. M. Secly, Spencer, N. Y.; F. D. Fish, Ithaca, N. Y.; W. H. Traphagen & Co., Trumansburg, N. Y.; A. E. Bullard, Philadelphia, N. Y.; T. A. Heffernan & Bro., Aurora, N. Y.; W. M. Terry Co., Bridgeport, Conn.; Lewis & Co., Mahanoy City, Pa.; Conrad J. Cluasen, Louisville, Ky.; Spokane Grain Co., Seattle, Wash.

NATIONAL HAY COMMITTEE.

President Goodrich of the National Hay Association reports the following appointments of standing committees and state vice-presidents for 1911-12, to-wit:

Arbitration Committee.—H. G. Pollock, Chairman, Middle Point, O.; W. L. Fain, Atlanta, Ga.; C. S. Carscallen, Jersey City, N. J.; G. F. Dimond, Mayville, Mich.; J. A. A. Geidel, Pittsburgh, Pa.

Conservation of Natural Resources.—E. H. Rich, Chairman, Ledyard, Iowa; T. H. Bunch, Little Rock, Ark.; G. S. Loftus, St. Paul, Minn.; H. S. Grimes, Portsmouth, O.; G. W. Voris, Stewardson, Ill.

Grades Committee.—Maurice Niezer, Chairman, Fort Wayne, Ind.; S. W. Kemp, Spencerville, O.; Albert Todd, Owosso, Mich.; Chas. England, Baltimore, Md.; H. H. Freeman, Chicago, Ill.

Transportation Committee.—H. W. Robinson, Chairman, Greenspring, O.; C. B. Stafford, Memphis, Tenn.; Joseph Gregg, Atlanta, Ga.; J. A. Heath, Richmond, Mich.; C. E. Nichols, Lowell, Ind.

Legislation Committee.—C. J. Austin, Chairman, New York; J. B. Daish, Washington, D. C.; H. H. Deam, Bluffton, Ind.; L. W. Powers, Norfolk, Va.; R. D. Rundell, Towanda, Pa.

Standard Bales Committee.—G. B. Cavert, Brad-dock, Pa.; W. N. Brown, Quincy, Ill.; A. W. Cheney, Springfield, O.; A. T. Weaver, Chicago, Ill.; W. T. Moore, Ann Arbor, Mich.

Statistics Committee.—Edgar M. Young, Jr., Chairman, Fredericksburg, Va.; J. W. Anderson, Kansas City, Mo.; Chas. Wolohan, Birch Run, Mich.; J. R. Pickell, Chicago; D. S. Wright, Weedsport, N. Y.

Joint Hay and Grain Committee.—E. L. Rogers, Chairman, Philadelphia, Pa.; F. D. Voris, Stewardson, Ill.; F. F. Collins, Cincinnati, O.

STATE VICE-PRESIDENTS.

C. T. Pierce, General Chairman, Van Wert, O.

Alabama.—B. R. Brown, Birmingham; F. S. Cleveland, Mobile; W. C. Agee, Selma.

Arkansas.—Roy Shirkey, Stuttgart; S. P. Davis, Little Rock; J. H. Sims, Hazen.

California.—A. E. Clutter, Los Angeles.

Colorado.—John L. Barr, Denver; F. L. Jamison, Trinidad; J. R. Sullivan, Las Animas.

Connecticut.—Frank A. Coles, Middletown; Abner Hendee, New Haven; W. M. Terry, Bridgeport.

District of Columbia.—S. C. Copley, F. L. Zirkle and Thomas A. Somers, Washington.

Florida.—R. W. Miller, Tampa; J. W. Pelot, Jacksonville; C. S. Bonacker, Pensacola.

Georgia.—C. C. McPhail, Atlanta; J. R. Whitman, Waycross; J. M. Fleming, Savannah.

Illinois.—Samuel Hastings, Cairo; James F. Umpleby, Pana; R. E. Karnes, Galatia.

Indiana.—J. R. Guild, Medarysville; Abraham Showalter, Keystone; A. B. Wall, Ridgeville.

Iowa.—S. T. Pease, Des Moines; Joseph Hunter, DeWitt; D. A. Fenn, Salem.

Kansas.—J. F. Shields, Chetopa; J. H. Turner, Wichita; T. W. Collins, Jamestown.

Kentucky.—Fred Zeitz, R. H. Menefee and B. G. Sandbrink, Louisville.

Louisiana.—H. W. Benedict, C. S. Leach, Jr., and J. V. Ferguson, New Orleans.

Massachusetts.—G. W. Crampton, Boston; Wm. Brooks, Holyoke; J. W. Doon, Worcester.

Maryland.—Gustav Herzer, Jr., Baltimore; W. H. D. Warfield, Sykesville; E. A. Clendenin, Colora.

Michigan.—J. F. Burroughs, Flint; R. M. Gough, Deckerville; J. H. Linn, Williamston.

Minnesota.—H. L. Elliott, Minneapolis; R. M. White, Duluth; E. A. Dutcher, Hancock.

Missouri.—J. D. Cole, Kansas City; C. F. Beardsley, St. Louis; G. F. Schreiner, Lamar.

Nebraska.—W. W. Watson, Inman; Edward Knapp, Omaha.

New Jersey.—F. A. Champlin, Newark; Wm. Schaaf, Jersey City; Burt R. Winchester, Newark.

New York.—Chas. M. Adams, Weedsport; W. H. Traphagen, Trumansburg; A. E. Bullard, Philadelphia.

North Carolina.—J. D. Earle, Asheville; J. S. McEachern, Wilmington; C. L. Spencer, New Berne.

Ohio.—Geo. M. White, Galion; John Hendricks, Van Lue; J. J. Curl, Cardington.

Oklahoma.—F. L. Kelly, Vinita; J. W. Allison, Afton; Frank Gaines, Fairland.

Pennsylvania.—E. A. Humeston, Meadville; H. S. Miller, Knoxville; D. V. Heck, Pittsburgh.

Rhode Island.—F. A. Decker, Providence; W. W. Dempster, Providence; F. E. Potter, Riverpoint.

Tennessee.—S. T. Pease, Memphis; Harry Winer, Chattanooga; W. R. Tate, Nashville.

Texas.—Allen Early, Amarillo.

Virginia.—E. Trammell, Norfolk; I. L. Sutherland, Richmond; B. T. Barksdale, Lynchburg.

Washington.—B. F. Shields, Seattle.

West Virginia.—B. D. Bailey, Clarksburg; R. R. Pennywitt, Charleston; Earl Pepper, Fairmont.

Wisconsin.—W. Seyk, Kewaunee; John Berg, Sturgeon Bay; J. W. Zimmerman, Greenleaf.

The New Orleans Board of Trade will appeal to the Commerce Commission for lower rates on rough rice from Arkansas and other rice producing districts. In Texas the rice men want lower rates as cleaned rice and rates from Houston to points north of Ohio River the same as allowed to New Orleans. Hearings on these matters will begin at Houston on Sept. 25.

Sec'y Strong reports the following new members of the Illinois Grain Dealers' Association, admitted during August: R. E. Coffman, Bentley; Colchester Milling Co., Colchester; Crow Grain Co., Beason; Ellis & Garrison, Industry; Hirsch Bros. Grain Co., Oakland; A. Z. Hoag, Exline; Lohr & Lummis, Augusta; J. F. Leising, Goodenow; B. B. Minor, Indianapolis; John Nelson, Donavan; Scott & Hoadley, LaFayette; Stumbaugh & Clark, Abingdon; C. O. Thrasher, Paxton; Tegge Bros., Papi-neau; West Bros. Grain Co., Manteno; Lohr & Lummis, Paloma.

COMMUNICATED

[We invite correspondence from everyone in any way interested in the grain trade on all topics connected therewith. We wish to see a general exchange of opinion on all subjects which pertain to the interest of the trade at large, or any branch of it.]

BEFORE THE COMMERCE COMMISSION.

Editors "Elevator and Grain Trade": The writer, accompanied by Mr. Lee Metcalf of Illiopolis, Ill., president; Mr. S. W. Strong of Urbana, Ill., secretary, and Mr. W. L. Shellabarger of Decatur, Ill., director, of the Illinois Grain Dealers' Association; Mr. Fred Wallbaum of Ashland, Ill., president, and Mr. J. A. McCreary, secretary, of the Farmers' Elevator Association of Illinois; Mr. Charles Hurst, president of the Decatur Chamber of Commerce, and the Hon. Charles Atkins, speaker of the House, of Bement, Ill., representing the producers, appeared before Interstate Commerce Commissioner, the Hon. Charles A. Prouty, in the Federal building in Chicago, on September 8 in support of a petition previously filed by the W. H. Suffern Grain Co., in which certain rates and privileges in effect at competing points are being asked for Decatur. If we are successful in our suit, we expect to erect a grain transfer elevator, equipped with the latest improved machinery for the cleaning, drying, mixing and bagging of grain, especially corn and oats, for the Southern and Eastern consuming markets.

Yours truly,

W. H. SUFFERN GRAIN CO.

Decatur, Ill.

W. H. Suffern.

DIRTY CORN AT MEMPHIS.

Editor American Elevator & Grain Trade: The following letter was received from Mr. N. S. Graves, Secretary of the Memphis Merchants' Exchange, Memphis, Tenn., under date of August 14th, 1911.

"Mr. S. W. Strong, Secretary Illinois Grain Dealers' Association, Urbana, Ill.:

"Dear Sir: At a meeting of the Grain Inspection Committee of the Memphis Merchants' Exchange today, the following resolution was passed:

"Resolved, That this committee call the attention of the Chief Inspector to the fact that the amount of cob in cars of corn has been steadily growing for the past year and has now reached such a proportion that in a great number of cases it is impossible to put this corn out on contract without recleaning, which involves an expense for that service and a considerable loss in weight. Therefore, the Chief Inspector is hereby instructed to grade all corn with an excessive amount of cob as 'Sample Corn, cob mixed.'"

Very truly yours,

S. W. STRONG,

Urbana, Ill.

Sec'y I. G. D. A.

GRASS SEEDS IN EUROPE.

Editor American Elevator and Grain Trade.—Regarding the condition of the field seed had on this side we beg to report as follows:

Red Clover.—During the latter part of June red clover recovered somewhat from the effects of the drought of the preceding weeks, but in July another period of very warm and dry weather set in, and the outlook has again deteriorated. The first cutting gave a good quality of hay, but the yield was small in general. On this side practically the entire seed crop is taken from the second cutting, which, however, has had a rather poor start this season owing to the intense heat and dryness prevailing throughout the larger part of central Europe. Our daily reports from many large seed raising districts are very unfavorable. The clover plants are said to have been totally scorched by heat and drought, and, therefore, they can neither produce the urgently required hay nor any seed. More and more one is inclined to believe we are going to get a very small crop of clover seed.

White clover.—Some sections are harvesting very nice qualities, while the reports from others run less satisfactory. But even for the poorer grades relatively high prices are being asked, and we do not expect to see a lower market. The old supplies are now being absorbed.

Alsike.—The prospects for this article are still uncertain; carry over very moderate.

Timothy.—In most districts the present outlook is for a small to medium yield, but some sections expect to secure a very fair crop. Old stocks, however, are cleared out everywhere, in spite of the fact that the extremely high values prevailing handicapped business to a certain extent.

Yours truly,

R. LIEFMANN SÖHNE NACHF.

Hamburg, Germany.

The total Louisiana rice crop of 1910-11, harvested off of 371,000 acres, was 3,100,000 bags, thus maintaining Louisiana as the banner state in rice. New Orleans handled in rough, 1,289,761 sacks, 22¢ in clean, 926,245 pockets. Of this, however, a proportion came from Arkansas and some little, very little, from Texas.

FIELD SEEDS

The L. L. Olds Seed Co. of Madison, Wis., has increased its capital to \$100,000.

This is seed corn week (September 11-16) in Minnesota by proclamation of the Governor.

The reported condition of peas and beans in Canada on August 10 ranged from 74 to 84 only.

An "ear" of corn is reported from Greenfield, Tenn., that is described as "ten ears on one body."

The elevator and warehouse of Noble Brothers, seed dealers of Gibson City, Ill., are being enlarged and improved.

The Barteldes Seed Co.'s store and office at 1521 Fifteenth St., Denver, was damaged by fire on August 21; loss, \$5,000.

A Moorhead, Minn., farmer hauled to town on August 20 one load of new timothy seed, for which he received a check for \$609.40.

A Chickasha, Okla., farmer thrashed the seed of three cuttings of alfalfa, which netted him \$92.50 on two acres. The hay was worth \$67.50.

German clover seed is said to be very popular in the South and heavy imports of the seed have been made and distributed through Richmond.

Robert Nicholson, formerly president of the Texas Seed and Floral Company of Dallas, Texas, has engaged in the seed business at Dallas on his own account.

The lima bean crop of Yuba and Sutter Counties, Calif., is said to promise well. There is no worry over the old stock and the acreage this year is larger than in 1910.

Alfalfa and clover have both done very well in northern Wisconsin this season, clover seed running in some places as high as 4 to 8 bus. per acre, according to Prof. Moore.

The Virginia State Fair will be held at Richmond during the second week of October, and in the seeds department it is expected the most striking exhibits will be of corn.

Rains are said to have materially damaged large quantities of alfalfa seed in Sedgwick County, Kan. Shawnee County, Kan., is said to have much alfalfa seed of good quality for export.

The Purdue University Station is prepared to supply a limited number of farmers of Indiana with 10-lb. lots of each of four or five varieties for testing the new winter wheats developed by the station.

The exports of flaxseed by Canada to the United States for the season of 1910 amounted to 1,774,096 bus. and to the United Kingdom 1,020,111 bus. For the coming year the amount of seed available for export by Canada is estimated at 8,200,000 bus.

The Wyoming Plant and Seed Breeding Co. at Worland, Wyo., harvested in August its winter emmer, that yielded as high as 180 bus. per acre, the entire tract averaging over 100 bus. This is the new strain of emmer worked out by Prof. Buffum.

The French bean crop is reported 50 per cent short this season. This crop is especially grown in some parts of the Loire Inferieure and the Vendee, on the seaside. Prices are not yet quite fixed but sellers are talking of about \$8.37 per qr. of 480 lbs. The bean is quite dry but rather small in size owing to the drought.

The most valuable car of farm products ever received at the Minneapolis Chamber of Commerce was received by Woodward & Co. on Aug. 30, says the Market Record. It was a car of fancy timothy seed that was raised on the Woodward farms in the Red River Valley. The car was bought by the Minneapolis Seed Co. at \$15, the net proceeds amounting to \$9,858.16.

Wagner & Harmon, Beloit, Kans., are heavy handlers of alfalfa seed, having shipped nearly \$40,000 worth of the crop of 1910, and expect to do better with this season's crop. The yield seems promising in that locality, one farmer from a 12-acre patch having secured over 108 bus. This, however, is an exceptional yield, and probably has not been duplicated thereabouts.

The bulk of the flaxseed is now beyond danger from frost, and there is the prospect of a fair yield. Late conditions have been mostly favorable to yield and current advices indicate a larger crop than was at one time thought probable. It is plain that whatever the yield may be a shortage will have to be met, through importations. The Canadian provinces have largely increased their flax acreage and that source promises to be available for the supply of this country's necessities.

A Kansas farmer writes the Nebraska Farmer that, "This has been the best summer for alfalfa to make seed of any we have ever seen. After the first crop was cut there was still moisture in the ground and this made a good growth of stalk for the seed crop, but there were no rains in the meantime to start a fresh growth. So all the energy of the plant went towards producing seed and some

of the yields reported along the river and creek bottoms seem almost past belief."

The Southwest Missouri Millers' Association will supply farmers in their district with seed wheat at first cost.

Picard & Co., London, Aug. 28, say: "There is a brisk trade passing in autumn sowing seeds, including clovers. Early and late trifoliums move freely at firm to rising prices; rape and mustard unchanged; rye firm; winter tares offering more freely; qualities fine."

NEW ALFALFAS, ETC.

At the Stuckey Ranch near Anaconda, Mont., it is reported that experiments were carried on this season by T. J. Kerlin with a number of new alfalfas, wheats and oats, but the outturn has not been published as yet. The alfalfas were seed from Prof. Hansen of North Dakota, procured by him in Siberia; the wheats were Syrian strains; the oats, the "Storm King," "Prince Royal" and "Roosevelt." These crops should have been ready for cutting and measuring about Sept. 1.

SHUGART-OURN SEED CO.

The Shugart-Ouren Seed Co., located at Council Bluffs, is one of the more prominent seed concerns of Iowa, notably of the western part of the state.



PREMISES OF THE SHUGART-OURN SEED CO., COUNCIL BLUFFS, IOWA.

Their handling and storage plant in that city is shown in the accompanying picture.

The total length of the building is 118 feet and its width 45½ feet. The warehouse shown in front of the elevator is three stories high above a basement, giving about 13,500 sq. ft. of floor space not counting the basement. The elevator has storage capacity for 30,000 bus. of grain.

The company handles grain and all kinds of field seeds in large and small lots. The managerial force is composed of C. G. Ouren, president; F. R. Davis, vice president; J. P. Davis, secretary, and A. P. Scofield, treasurer.

THE SEED CROP.

The outcome of the grass seed crop, clovers and timothy, is still uncertain. Prices remain high, and it is certain the yield is reduced on a reduced acreage. Zahm & Co., Toledo, of recent date, say:

"Adverse weather conditions which prevailed in this country and Canada seem to have passed around the globe, causing not only a shortage in the seed supplies but other commodities as well. The short acreage can be accounted for from two causes: First: A poor catch of the sowing in the spring of 1910 and winter killing; second: The dry, hot weather which burned out the pasture land in June and July of this year drove many farmers to the necessity of pasturing their clover fields. One feature is very prominently brought out; that is, the very poor condition of the young clover (that is, the sowing of the spring of 1911). While the 1910 sowing was badly damaged, there seems to be a much worse state of affairs with the 1911 sowing. What little withstood the dry weather of May and June seems to have perished as soon as the wheat and oats were cut; exposing the tender plant to the hot sun. So at present it seems that practically none of the young clover is alive. The above

applies principally to the state of Indiana and parts of the states of Ohio, Illinois and Wisconsin.

"Letters received by us this week from Indiana, Ohio and Illinois report the seed turning out better than expected, some getting as high as 5 bus. to the acre. They are very fortunate. These conditions seem to run in little pockets, and dealers who have canvassed the states of Indiana, Ohio, etc., report that the pockets are few and far between. If all the sections were barren of seed those who have sold short would be in a bad predicament. It is even hoped that Europe will have a surplus as this country will need a great deal more than possibly can be raised here."

THE MICHIGAN BEAN JOBBERS.

The annual convention of the Michigan Bean Jobbers' Association was held at Detroit on September 7 and 8.

The reports of members indicated a total crop in the state of \$5,400,000 bushels, having a value of \$11,000,000. This is 600,000 bushels less than in 1910, although the acreage planted was larger by 10 per cent. The Michigan crop is 65 per cent of the total for the country. A California report to the convention indicated a shortage there in white beans, but a proportional increase in the lima bean yield of which there will be 2,500,000 bags of 85 pounds each.

The important legislation of the convention was

the adoption of a resolution providing that grocers shall pay a separate charge for the bag containers of beans, but that the price of beans would be proportionally reduced so that the price of a bag should not be taxable to the consumer.

The officers elected for the ensuing year were as follows: President, Fred Welch, Owosso; first vice president, A. L. Chamberlain, Sandusky; second vice president, E. Chappie, Belding; third vice president, John Wrigglesworth, Cohoctah; treasurer, W. N. Isbell, Lansing; directors, W. J. Bliss, Saginaw, and K. P. Kimball, Detroit.

PURE CHUL WHEAT.

H. F. Blanchard of the Department of Agriculture, at work on wheat at Chico, Calif., reports having separated a pure white wheat from among the chul wheats from Turkestan with which he has been experimenting at Chico. In his tests of this season, just completed, the new wheat has averaged five bushels more to the acre than the white Australian variety, which is accepted as standard by the farmers of the West. On the station land, which had been planted to alfalfa and corn for the last four years, the chul wheat this season yielded 88 bushels to the acre, as against 70 bushels of the Australian variety produced under exactly similar conditions.

SEED WHEAT DISTRIBUTION.

The Union Pacific, Rock Island, Missouri Pacific and Santa Fe systems in Kansas have been granted permission by the Railroad Commission to haul seed wheat westward to needy farmers free of charge. The main shortage of seed is in the four northwestern counties of Gore, Thomas, Logan and Wallace, which have called for 125,000 bushels of seed. Outside of the counties named, the demand for seed does not appear to be urgent.

HAY AND STRAW

An alfalfa mill may be erected at Norfolk, Nebr.

An alfalfa meal mill is being erected at Lowell, Nebr., by H. Yensen.

The North Dakota hay crop is good far in excess of that raised in 1910.

The Wisconsin hay crop is reported good in quality, with a heavy yield.

The price of hay is going down according to reports received from St. Paul.

M. Beggs recently harvested a \$30,000 crop of timothy from his farm north of Hallock, Minn.

The Big Horn Basin in northern Wyoming is enjoying the largest alfalfa crop in its history.

The drought is said to have reduced the hay crop to one-half its usual yield except where alfalfa is grown.

F. D. Coburn, Secretary of Agriculture of Kansas, has offered \$30 in special prizes for the best alfalfa displayed at the State Fair.

Alfalfa seven feet high will be exhibited at the Washington State Fair. It was produced on the Yakima Indian Reservation.

In the region around Niwot, Colo., the hay is mostly in the stack. The second cutting of alfalfa was in general better than the first.

Judge W. F. Rightmire of Topeka, Kan., has invented an alfalfa dryer and will try it out on the ranch of C. M. Gregory at that place.

According to a report from Spokane, Wash., only a very slight damage was done to the timothy hay crop in that region by the recent showers.

The report comes from Pekin, Ill., that the local feeders are importing baled alfalfa owing to the high price and scarcity of good hay in that vicinity.

F. W. Meyer recently called a meeting of the hay farmers at Bonney, Texas, for the purpose of considering a new system of handling the South Texas hay products.

The largest crop of hay ever harvested in the region of Morocco, Ind., is being obtained from the Kankakee marshes. The yield is from 2½ to 3 tons an acre.

The crop of alfalfa in the vicinity of Gering, Nebr., is the best in years. A yield of two tons per acre is reported in some places and there will probably be four cuttings.

In many parts of the alfalfa region of Kansas there will be two more cuttings. The yield will be good and the quality is fine. The recent heavy rains have materially helped the yield.

The hay crop of New York State can be increased from 10 to 15 per cent, according to the results obtained from a series of experiments carried on by the New York State College of Agriculture.

In order to prevent the alfalfa weevil from crossing into Nevada from Utah where it is prevalent, Cecil W. Creel of the United States Bureau of Entomology, will carry on field work in Nevada.

Pittsburgh, Philadelphia, Baltimore and New York report plenty of old hay on hand, Washington a small amount and Cleveland, Detroit, Chattanooga, Boston, Kansas City, Denver, Birmingham, and Tampa, none.

The yield of hay and clover is estimated at 12,189,000 tons for Canada, being 1.43 tons per acre. Ontario yielded 4,736,000 tons, Quebec 5,028,000 tons, Prince Edward Isle 254,000 tons, Nova Scotia 941,000 tons, and New Brunswick 885,000 tons.

One thousand car loads of hay will be shipped to Minnesota and North Dakota on the Northern Pacific Railroad, for even with the shipping charge of \$6 per ton it can be sold at least \$2 cheaper than the hay grown in Minnesota and North Dakota.

The tame crop of 1911 hay is estimated at less than 60 per cent in August of a full crop, against 80 per cent in August, 1910, the difference being due to the low state of moisture in the subsoil. While the hay crop of 1911 was the lowest in yield per acre in almost a decade, yet its value was higher, being \$750,000,000, against \$50,000,000 in 1909.

Grant Cote, president of the New York Hay Dealers' Association, recently registered a protest against the increased tariff of the New York Central Railroad Co. for loading and unloading hay at the New York freight terminal. The road previously charged 25 cents per car for unloading hay and \$1 for reloading from the shed to the car. Now the rates are 50 cents and \$1.50 respectively.

The St. Paul hay and grain dealers have filed a resolution and protest with the State Fair managers who have bought largely of Kansas hay, and declare that "It is the unanimous opinion of the members therein that the Minnesota grains and grasses should be given preference to be used as forage at said state fair; that the state fair managers' attention be respectfully invited to the fact that the state fair is believed to be for the express purpose of advancing and promoting the interests

of the state of Minnesota, and that said contract specifications should be so amended that Minnesota grasses be substituted for the one specified in said specifications."

SOME HAY FIGURES.

Sec'y J. Vining Taylor, of the National Hay Association, has found by enquiry that the per cent of an average hay crop harvested in Indiana is 65; Illinois, 45; Ohio, 60; New York, 79; Pennsylvania, 81; Michigan, 63; Iowa, 70; Nebraska, 100. Of these amounts, except in New York where only 19 per cent is timothy, from 40 to 48 per cent is timothy. The amount of the crop available for market is 57 per cent in Indiana, 58 in Illinois, 33 in Ohio, 50 in New York, 28 in Pennsylvania, 45 in Michigan, 50 in Iowa, and 75 in Nebraska. Only a small part of this is now held by shippers, the greatest amounts being 50 per cent in Illinois and 13 per cent in New York. Most of the states expect higher or steady prices, but Ohio and Arkansas look for a decline.

CANADIAN GRADES OF HAY.

The following is the Government grading and inspection of Canadian hay and straw:

Prime timothy shall be pure timothy, perfect in color, sound and well cured.

No. 1 timothy shall be timothy with not more than one-eighth of clover or other tame grasses mixed, of good color, sound and well cured.

No. 2 timothy shall be timothy with not more than one-third of clover or other tame grasses mixed of good color, sound and well cured.

No. 3 timothy shall consist of at least fifty per cent of timothy and the balance of clover or other tame grasses mixed, of fair color, sound and well cured.

No. 1 clover shall be clover with not more than one-quarter of timothy or other tame grasses mixed, of good color, sound and well cured.

No. 2 clover shall be clover with not more than one-quarter of timothy or other tame grasses mixed, of fair color, sound and well cured.

Mixed hay shall be hay which does not come under the description of timothy or clover, and which is in good condition, of good color, sound and well cured.

No grade shall include all kinds of hay badly cured, stained or out of condition.

Shipping grade shall be hay in good condition, pressed, sound and well cured.

The rates for the inspection of hay shall be twenty cents for every ton.

In the province of Quebec, the following shall be the standard weights for hay and straw, unless sold by the ton, or unless it appears that the parties to the contract agreed otherwise: A bundle of timothy, clover or other hay, with a timothy band, fifteen pounds; a bundle of timothy, clover or other hay, bound with a withe, sixteen pounds; a bundle of straw, twelve pounds.

NATIONAL ASSOCIATION AND HAY INSPECTION

In the course of the annual report of President Dean of the National Hay Association, some mention was made of the progress of hay inspection under the rules of the Association. Especially interesting was the agreement made between the Association and the National Hay Co., a corporation formed at Cleveland, O., in December last, for the purpose of buying, selling and grading hay for those who wished to avail themselves of the privileges the company offered. Upon the completion of the incorporation the Company made requisition for the appointment of an official inspector for Cleveland, in conformity with the rules adopted by the National Association. In compliance with this request, Charles J. Sealy, of New York, was appointed inspector in January; and, said Mr. Dean, "I have before me sufficient information to warrant me in saying that the plan has worked admirably, fully meeting the expectations of the most sanguine of its originators. The company, in keeping with our rules, agreed to reimburse the Association for every expense attached to the inspection, including salary and expense of the inspector, and bound themselves to this effect by a good and sufficient bond. All financial requirements from them have been met and paid. The inspector in turn, bonded himself to the Association for a faithful performance of his duties;" and, continued Mr. Dean, "from what I can learn, he has fully met all requirements. I have to say that later, on an official trip through the South, I came in contact with cars of hay that had been inspected at Cleveland, and those receiving them gave me assurance that they were doubly gratified with the system and were willing, when receiving an inspection certificate attached to invoices, to pay the extra expense necessary to cover the fee of inspection."

Later on, in the same report, it appeared that National Association rules are used at Chicago, Kansas City, Louisville, (with construction of rules "very liberal"), Nashville ("liberal"), Chattanooga (supposedly, but no inspector engaged by the market), Birmingham, New Orleans (construction "very fair"), Mobile (unofficially), Jacksonville

(construction "good"), Savannah (construction "fair"). Weighing in the South is practically all done on private scales, the buyers'.

NEW YORK HAY WEIGHTS.

In the new New York law relating to the tagging of hay bales to show weight the words, "Every person who puts up and presses, etc.," have been erroneously construed to refer to the man who operates the baler, the foreman of the press gang, says the Hay Trade Journal. This, however, is wrong. It was not the intent of the law, nor is it the interpretation of the law by the attorney-general. "Every person, etc.," means the parties owning the hay at the time it is being pressed. The man who owns the hay hires the pressers and they are his paid agents and he is responsible for their acts. It is up to the owner of the hay to see that the pressers are honest and that the packages are put up and marked correctly and in accordance with the law. The penalty is, "A person violating this section shall forfeit to the people of the state the sum of five dollars for each such violation;" that is, for each bale improperly marked. Although the law as it reads requires the tag to be "some board or wood," Superintendent Reichmann of the Bureau of Weights and Measures says that the use of wood pulp, that is, a card-board, or a manila tag, will be accepted, as it has been found that these tags will withstand the ride to market fully as well as a piece of a shingle.

MONTREAL HAY.

The Montreal hay market continues very strong and excited for the week of September 9, owing to the high prices being offered by the English buyers, while American operators are buying very liberally at firm prices, but no change has taken place during the week in the local market. Advances by cable from Liverpool report stocks are light and prices are firm at a further advance of 60c to 96c. Quotations this week are \$19.20 to \$19.80. The London market is also very strong, another advance of \$1.20 being noted under a good demand. Quotations are \$20.40, c. i. f. The Manchester market has continued strong, a further advance being recorded and quotations being very firm at \$20.40 c. i. f. The Bristol market has also shown a stronger tone, prices being firm at \$20.40 to \$21.60 c. i. f. The Glasgow market is the poorest in the lot, quotations being unchanged at \$16.80 to \$19.20 as to grade. Montreal high prices: No. 1, \$15; No. 2 extra, \$13; No. 2 ordinary, \$10.50; clover mixed, \$9.

The outlook for hay promises great activity as England and the United States are competing for the Canadian surplus production. Cables from England report the market there firmer and higher, London having advanced 4s 5s (96c to \$1.20), and Bristol has moved up 5s to 10s (\$1.20 to \$2.40) per ton since Sept. 1. The exports from Montreal to England for week ending September 6 were 27,000 bales, but double that quantity could have been sent forward, had space been obtainable on our ocean steamers. Americans are buying Canadian hay at country points pretty freely and are paying fully as high prices at country points as can be had in this market, as high as \$14.00 to \$15.00 having been paid for No. 1 f. o. b. at country points for the American market, and \$12.00 to \$13.00 for No. 2.—Trade Bulletin.

HIGHEST MARKET PRICES.

The following table in the Hay Trade Journal shows the highest prices, also prices for No. 3 timothy hay in the markets for the week of Sept. 9:

	Choice.	No. 3.
New York.....	\$25.00	\$19.00
Brooklyn	25.00	19.00
Jersey City	27.00	19.00
Boston	24.00	15.00
Providence	24.00	16.00
Philadelphia	24.50	19.50
Pittsburg	23.00	20.00
Pittsburg, prairie	15.00	
Baltimore	25.50	19.50
Richmond	24.00	
Washington	23.50	20.00
Newport News	25.00	
New Orleans	27.50	21.50
New Orleans, prairie.....	12.00	
Buffalo	21.00	16.00
Minneapolis	19.00	14.00
Minneapolis, prairie	15.00	
St. Paul	18.25	10.75
St. Paul, prairie	15.25	
Duluth	17.00	
Duluth, prairie	14.50	
Chicago	22.50	16.50
Chicago, prairie.....	15.00	
Cincinnati	22.00	18.00
Cleveland	22.50	18.00
Kansas City	19.00	12.00
Kansas City, prairie.....	13.50	
San Francisco	18.00	
London	105s	
Atlanta	26.50	
Norfolk	23.50	21.00

CROP REPORTS

The large amount of rain received recently has reduced the quality of oats in Iowa.

Nebraska reports that wheat is excellent in quality and only a little below last year in yield. Oats will be a little short, but the crop is not a failure.

The total wheat crop of Washington, Montana, Oregon and Idaho will be about 77,000,000 bushels. Barley and oats in this region are yielding heavy.

Using the grain yields on the farm of the University of Wisconsin as a basis, it is predicted that the grain crop of the state will be slightly below that of 1910.

The Oklahoma State Crop Report places the condition of corn at 28.9 and the yield 9 bus. per acre as compared with a condition of 56 last year, when the yield was 90,000,000.

The corn condition in Kentucky for September is 75 as compared with 79 in August and 73 last September. The wheat yield is 97 per cent of full crop and oats 71 per cent.

Secretary Fowler of the Northwestern Grain Dealers' Association estimates the crops of the Canadian Northwest at 177,400,000 bushels of wheat, 182,250,000 bushels of oats and 34,315,000 bushels of barley.

The corn crop of Hungary for 1911 will be 30 per cent below that of 1910 according to the estimate of the Hungarian Minister of Commerce. This year's crop totals 33,220,000 metric-centners as compared with 47,686,269 in 1910.

The average yield of wheat per acre in Michigan will probably be about 18 bushels owing to the damage done by the Hessian fly in the southwestern part of the state and the hot and dry weather in the central and northern portions.

The crop condition in Montana is a little better than normal for a period of ten years. The acreage has increased and the yield will be about 19,000,000 bus. as against 16,600,000 last year. There is an increased acreage of oats and high average of yield. The hay crop is large.

According to S. J. Gibbs, secretary of the Texas Grain Dealers' Association, the state corn crop is a failure, due to insects, the drouth and heat. From other sources comes the report that wheat will only be about half a crop and oats about 75 per cent of a normal yield.

The Michigan September report makes the corn condition 83, for August 82 and for last September 81, when the crop was 60,000,000 bushels. Wheat yield per acre 17 bushels, year ago 19 and quality 87. Oats yield 27 as compared with 31 bushels a year ago, quality 85. Rye yield 14, the same as a year ago.

SEPTEMBER CROP REPORT.

The Crop Report for September gives the following estimates for the United States:

Crops.	Acreage 1911.			1911.
	Condition, Sept. 1.	P. c. of 1910.	P. c. of 1910.	
Corn	70.3	78.2	101.7	115,939,000
Winter wheat	...	...	106.6	31,367,000
Spring wheat	*56.7	*63.1	104.9	20,757,000
All wheat	*68.8	*61.7	105.9	52,124,000
Oats	*64.5	*83.3	99.9	35,250,000
Barley	*65.5	*69.8	97.0	7,038,000
Rye	...	...	96.7	1,962,000
Flax	68.4	48.3	103.3	3,013,000
Rice	87.2	88.8	97.6	705,700
Hay	...	...	94.1	43,017,000

*Condition at time of harvest.

The yields indicated by the condition of crops on September 1, 1911, or at time of harvest, the final yields in 1910, and the averages for 1906-1910, follows:

Crops.	Indicated total production 1911.			P. c.
	Yield Per Acre.	1911.	1910.	
Corn
Winter wheat
Spring wheat
All wheat
Oats
Barley
Rye
Buckwheat
Potatoes
Tobacco
Flax
Rice
Hay

*Preliminary estimate of yield.

Preliminary returns indicate a hay yield of about 1.09 tons per acre, or a total of 46,969,000 tons, as compared with 60,978,000 finally estimated last

year. Quality is 90.3, against 92.5 last year and a ten-year average of 91.1.

States.	CORN.			
	Per Cent of U. S. Condition Sept. 1.	1911.	1910.	Aug. 1, 1911.
Illinois	9.1	78	86	74
Iowa	8.5	68	82	68
Texas	8.0	39	75	40
Kansas	7.9	53	59	54
Missouri	7.1	69	83	61
Nebraska	6.9	63	68	64
Oklahoma	5.1	27	50	33
Indiana	4.4	80	85	80
Georgia	3.9	88	88	89
Ohio	3.3	83	72	80
Kentucky	3.2	73	82	74
Tennessee	3.2	92	85	91
Alabama	3.2	90	92	91
Mississippi	2.9	86	93	89
North Carolina	2.6	79	86	78
Arkansas	2.5	83	91	82
Louisiana	2.2	76	90	76
South Carolina	2.2	78	86	80
South Dakota	2.0	74	82	75
Virginia	1.8	72	82	70
Michigan	1.8	81	77	81
Minnesota	1.6	82	83	81
Wisconsin	1.4	88	75	85
Pennsylvania	1.4	89	78	87
United States	100.0	70.3	78.2	69.6

States.	OATS.			
	Per Cent of U. S. Condition at time of Harvest.	1911.	1910.	Ten-yr. average, Aug. 1, 1911.
Iowa	13.5	66	100	80
Illinois	12.5	71	94	77
Minnesota	7.7	61	67	83
Nebraska	7.4	31	78	74
Wisconsin	6.6	77	70	84
Indiana	5.1	76	94	78
Ohio	4.8	77	94	83
North Dakota	4.6	66	25	79
South Dakota	4.3	24	66	88
Kansas	4.3	35	91	66
Michigan	4.2	75	83	82
New York	3.8	80	93	88
Pennsylvania	2.8	79	97	84
United States	100.0	64.5	83.3	79.5

THE TOTALS IN FIGURES.

Put into figures, in smallest form, the report means that the indicated production is:

Grain.	Bushels.	Loss from 1910.
Corn	2,736,000,000	389,000,000
Winter wheat	455,000,000	9,000,000
Spring wheat	203,000,000	28,000,000
Total wheat	658,000,000	37,000,000
Oats	842,000,000	285,000,000
Rye	30,000,000	2,000,000
Barley	143,000,000	20,000,000
Buckwheat	16,000,000	2,000,000
Rice	23,000,000	2,000,000
Flax seed	23,000,000	*9,000,000
Hay, tons	46,969,000	14,000,000

*Increase.

GENERAL REVIEW CROP CONDITIONS.

The condition of all crops combined on September 1, in the United States, was approximately 15.2 per cent below the average conditions on that date, whereas on August 1 general conditions were about 14.6 per cent below average, on July 1 about 10.7 per cent below, and on June 1 about 2.8 per cent below average conditions. Thus it appears that the present crop season has continued unfavorable as it progressed toward harvest. During the past month conditions improved somewhat in most northern states but declined in most southern states.

Prices paid to farmers in the United States on September 1, compared with September 1 last year, for barley averaged 34.6 per cent higher, hay 23.1 per cent higher, oats 5.2 per cent higher, rye 3.8 per cent higher, buckwheat 1.9 per cent higher; corn 0.6 per cent lower, flax 7.5 per cent lower, wheat 11.5 per cent lower.

S. W. Strong, secretary of the Illinois Grain Dealers' Association, reports that from 423 reports from the corn growing sections of the state, 278 reports say no old oats of the 1910 crop remain while 141 reports have confused the old oats and the crop of 1911 so they cannot be used.

The International Institute of Agriculture at Rome gives the following estimate of the annual production of wheat, on the basis of 1,000 parts for the entire world: United States, 207.3; European Russia, 167.9; France, 108.4; British India, 98.4; Italy, 60; Hungary, 53.6; Argentina, 46.6; Germany, 44.9; Spain, 35.8; Canada, 33.9; Roumania, 24.2; Siberia, 20.9; Australia, 20.1; Austria, 18.2; Great Britain and Ireland, 17.7, and other countries, 42.

BARLEY and MALT

A large malt house has been put in operation at Longmont, Colo.

The Rice Malting Co., Ltd., of Winnipeg, Man., has increased its capital stock to \$100,000.

A grain cleaner with a capacity of 8,000 bushels of grain an hour will be installed by the Manitowoc Malting Co. of Manitowoc, Wis.

The Calumet Malting Co. of Chicago recently purchased a Rich Patent Barley Grader from the S. Howes Co. of Silver Creek, N. Y.

The samples of new barley received in Montreal, Que., recently have shown good color but the weight is light on account of the dry weather.

Barley in the region of Devil's Lake, N. D., is reported to be the best ever produced and the yield is above the average. The price has reached \$1.10 per bushel.

A new fireproof malt house, malt cleaning elevator and shipping house will be completed by December 1, for the William Rahr Sons Co., of Manitowoc, Wis.

Several samples of new barley have been forwarded to dealers at Montreal, Que., the quality showing good color but the weight is light owing to dry weather.

A Rich Patent Barley Testing Grader has been installed by the Milwaukee Malting Co. of Milwaukee, Wis. The S. Howes Co. of Silver Creek, N. Y., has the contract.

The Northwestern Malt & Grain Co. of Chicago recently gave its seventh repeat order to the S. Howes Co. of Silver Creek, N. Y., for a Rich Patent Barley Grader.

The Geneva Malting Co. of Geneva, N. Y., has been incorporated by Charles J. MacLaughlin, Samuel Schwartzman and William Subrink, with a capital stock of \$100,000.

The Kerr-Gifford Grain Co. recently purchased a few small lots of barley at Lewiston, Idaho, at \$1.52½ per 100 pounds, the highest price ever paid for malt material in the interior.

According to a new weight law recently adopted, grain buyers may not take more than 48 pounds of barley to a bushel in the state of Minnesota. The old weight was 50 pounds per bushel.

E. P. Bacon & Co., of Milwaukee, Wis., in its annual barley crop circular, states that the yield of Wisconsin barley for 1911 is 22 bushels per acre or three bushels less than in 1910 and that the quality is inferior.

An agreement was recently made by the farmers in Columbia County, Wash., to sell barley of the malting grade at not less than \$25 a ton. About 130,000 sacks were disposed of at that price. Feed barley was sold at \$23 a ton.

The barley buying season has been brought to a close in the Dayton, Wash., section, as the supply has been exhausted. Most of the crop in the Pacific Northwest is out of the farmers' hands.

The Star Malt & Grain Co. of Lomira, Wis., has placed a contract with the S. Howes Co. of Silver Creek, N. Y., for a 1,500 bushel Eureka Barley Cleaner, with double pans and twin shoes and fitted with automatic sieve cleaners.

The largest sale of barley in the history of Columbia County, Wash., was made recently when 250,000 sacks were sold in a day, 60,000 sacks being purchased by the Campbell, Sanford & Henley Grain Co. The price paid was \$1.25 per hundred.

The S. Howes Co. of Silver Creek, N. Y., has the contract to furnish a Eureka Barley Grading System for the malt houses of H. W. Rickel & Co. at Detroit, Mich. The contract includes two of the largest size Rich Patent Barley Graders having a combined capacity of 6,000 bushels per day.

The S. Howes Co. of Silver Creek, N. Y., will furnish the John Hauck Brewing Co. of Cincinnati, Ohio, with malt cleaning machinery, including a Eureka Twin-shoe Malt Separator with magnetic attachment and a Eureka All-metal Sprouts and Dust Collector. The cost will be about \$18,000.

A Walla Walla press correspondent says that the movements of barley buyers in that state seem to indicate that someone or some group of operators, is trying to obtain control of the barley of the Coast. At any rate, he says, all the barley sold in the Walla Walla district to the middle of August, at least, went to the Jones-Scott Co. of that city, as agents, presumably.

A part car of black Russian barley shipped from Milledgeville, Ill., to F. E. Winans & Co., Chicago, was disposed of Aug. 30, after having puzzled the trade for several days, says the Inter-Ocean. It was the first of this grade of barley ever received here, and few of the experts knew what it was. One expert declared it black Russian barley, although others thought it was Chinese barley or a Burbank-

ized black Egyptian barley. The grain was of good weight, but maltsters were afraid to buy it, even as an experiment, and it was finally disposed of on a feed basis.

Finest qualities of barley command splendid prices. Never was a year with so wide a quality range. Chicago cash prices 70c to \$1.20 per bushel and screenings down to 30c. 1911 barley crop is down to consumptive hardpan at 135,000,000, versus 162,000,000 in 1910, and 170,000,000 in 1909. Bushel yields of 19.8 are 5 bushels below a ten-year basis. Maltsters use the best barley, but they are the closest of all discriminators. Not much plump barley this year. Much disappointment recently on the part of those who have mailed barley samples which have been graded "feed." If you have the real fat berry you can get the price in Chicago.—E. W. Wagner, Aug. 26.

The barley crop in the leading barley states of the West is short of the usual yield. The decrease in acreage is considerable when taking into the accounting the loss suffered through abandoned fields, altogether reaching well toward 7 per cent under the acreage harvested a year ago, says the Market Record. Much of this grain now arriving is of very good color, though it is understood to be of the threshings preceding later heavy rains. Reports indicate a larger per cent of discolored barley to come from the delayed threshings. The poorer grain is largely in western Minnesota, western and central South Dakota, with parts of Iowa and much of North Dakota and parts of Wisconsin, though in smaller area than in some of the other states. As a rule the barley now in the market is sound, although some is going through the sweating process and requires care in the handling. Hot weather ripened the crop prematurely, causing a shrinkage in the berry and consequent loss of yield. Thus far color and soundness meet expectation; largely the quality entitles the grain to consideration for malting.

[From the "American Brewers' Review."]

THE CLEANING AND GRADING OF BARLEY.

BY WM. H. PRINZ.

The importance of the thorough cleaning and grading of barley is getting to be more recognized every day. Not only is it necessary that barley be well cleaned and graded, but it is just as requisite that the offal or screenings should be put in such condition as will cause them to bring the highest market prices. For instance, it stands to reason that barley screenings which are free from sticks, straws, weeds, seeds and other foreign matter will certainly bring a better price than though the said impurities were in them.

So it is with the seeds; if each kind is separated by itself, they will bring a handsome profit in themselves. The whole proposition is to minimize the loss in cleaning and save all of the by-products and to put each in the proper shape in order to obtain the highest market value. This can only be done by having a complete and most improved line of machines and arrangements necessary.

When barley is shipped by the farmer, it seldom has received any cleaning and gets not very much more at the receiving elevator; so when it gets to the maltster, it must be put through the entire cleaning and grading process before it can be malted properly.

We must bear in mind that the price of barley to the maltster at the board of trade or chamber of commerce is not the figure by which the malt prices should be gauged. To the original cost of the barley should be added the loss in cleaning, which in some years is very heavy. The proper way to gauge malt prices is to find out what the barley costs when it reaches the steep tank. It must also be taken into consideration that the loss in cleaning varies with the different kinds of barley, in just the same manner as the screenings differ. For instance, take screenings which are heavy and free from black oats; they will bring a better price than light or chaffy screenings. The same thing applies to the seeds and broken kernels, which by themselves would bring a better price than if mixed with other worthless stuff.

As is the case in all industries, all by-product should be converted into money in order to minimize the manufacturing cost. It would not be profitable for a country elevator or even a receiving elevator to install all the machinery necessary to properly handle barley, for they handle all kinds of grain and could not afford to keep these machines running on barley alone; and as they do not know what kinds of barley should be mixed or blended together so that they will malt evenly, it is best that barley be shipped to the maltster in the rough, and the matter of cleaning, grading and blending it left to him. He knows what his trade demands and how to make his own grades to suit that trade.

HOW TO HANDLE BARLEY.

The following is a description of how barley should be handled and the different machines and manipulations it should go through:

When barley is unloaded from the cars into the hopper that feeds the receiving elevator, there should be placed over this hopper a coarse screen

to keep out all heavy stuff and prevent such things as pieces of wood, coal and iron from getting into the elevator or conveyor and damaging them.

The barley should be taken by the receiving elevator to the top of the cleaning house, and then put into a garner to facilitate the uninterrupted unloading of cars; then sent to a hopper scale, where it is weighed; then it should be sent to the storage bins of the elevator, or to a bin over the first cleaner. The latter should not be a regular cleaner, but simply a scalper to separate all the straws, sticks and all such material as is practically worthless and which interferes with the work of the regular cleaner and reduces its capacity.

Regular cleaners do not come up to the rated capacity on this account. A scalper which should remove all of this coarse rubbish would be a welcome addition to any plant. A scalper should be a machine of large capacity, with an unchokable feed. It should have wide sieves with suitable perforations. These sieves should be of the self-cleaning type or have a self-cleaning attachment.

Large fan capacity should be provided so that the barley can be handled as fast as the elevator brings it in. The tailings from this machine, being worthless, should be spouted to the boiler room and burned.

From the scalper, the barley should first go to a hopper placed underneath it, or to storage bins to be finished later. If, however, it is desired that the barley go through the whole cleaning process before being stored, it should go from the scalper to the hopper underneath and below this should be the regular cleaner and separator. It is always best to have a hopper above a cleaner, as the feed will be more regular than if the barley were spouted from an elevator direct, and it will not need so much attention from the men.

The regular cleaner or separator should have a larger capacity than is actually needed; then the barley can be run over it slowly, and better work will be done. The feed should be unchokable, and there should be two air separations, as well as wide sieve surface with small perforations and some device to distribute the barley evenly over the screens. Automatic brushes to keep the sieves clean are a necessity.

Of course, it is necessary that the cleaner have a seed sieve in it, with three-cornered perforations, to take out the wild buckwheat. Ample fan capacity should be provided so that the air separations will be all that can be desired.

All the bearings and eccentricities on this machine should be not only self-oiling but dust proof as well. To prevent vibration of the floor or building, the shaker should be counterbalanced. The machine will work much better as a result. What this machine has to do is to get the barley ready for the graders by taking out most of the light barley, oats, seeds, etc., and overtailing all larger grains, such as corn, unthreshed heads, etc.

The clean barley should drop into a hopper placed underneath the cleaner, and separate bins should be provided for the different classes of screenings, seeds and dust.

From the clean barley hopper below the cleaner the barley should go to a broken-kernel and seed separator. This is a machine which has always been neglected. If not omitted altogether, it has generally been of so small a capacity that it could not be expected to do its work properly. This apparatus is so constructed that from two to twenty-four cylinders can be placed in a single frame, thus making it suitable for the capacity of any malt house. It will make an absolutely perfect separation of all broken kernels, buckwheat, mustard, wild turnip, cockle, flax, wild peas and all grass seeds, as well as small stones and sand. There is no separator built which will take out even a large percentage of these impurities; so the broken-kernel separator must be resorted to, to make such a separation; which is most desirable, especially in the case of a dry harvest, when in threshing the barley close, a great deal is broken. If these kernels are left in, those ends which have no germ in them will not malt, but will remain raw and become a loss to the brewer. What is most objectionable about them is that they breed mould in the germinating stage and other sound grains are infected thereby.

After the barley has been separated by this apparatus, it should pass to a hopper, and thence to the graders.

The grading of barley is not new, having been done in Europe for years, but the machines they used over there were of so small a capacity that it made grading expensive. It is highly important that barley be graded, both for malting and seed purposes.

For malting, at least two grades should be made, the heavier barley for keg beer malt and the lighter weight for bottle beer malt or distillers' malt. Experiments made with graded and ungraded barley have shown conclusively that the graded barley malted more uniformly, and the malt produced therefrom gave a much larger amount of extract. Small berry malt having more albumen, if made into bottle beer malt, gives a more aromatic malt, and if made into distillers' malt, a higher amount

of diastase. To make a long story short, graded malt will steep even, germinate even, dry even, and give a higher yield to the brewer and distiller. It also gives better returns to the maltster, as the loss is less, and his malt should by all means command a better price. It has taken many years of experimental work and a large expenditure of money to produce a successful grader. No one knows this better than I do, as I started in on it about twenty-five years ago. The first was a sieve grader which did not prove successful. Then came the air grader which is no longer used. Then a grader which had both air and sieve action.

SOY BEAN IN THE SOUTH.

L. A. Markham of the I. M. & S. Ry. at Little Rock very recently recommended highly the planting (from April 15 to July 1) of the soy bean for pasture and hay, which, he considers, is in some respects and under certain conditions decidedly more desirable for pasturage and hay than the almost universally planted cow pea. Among its advantages over the cow pea are the decidedly larger yield of seed, greater convenience in harvesting and feeding, a far lower susceptibility to injury by frost, and much greater drouth resistance, coupled with a remarkable ability to withstand poor drainage and excessive rainfall.

The soy bean, being a native of southeastern Asia, is, therefore, well suited to the climatic conditions prevailing over the cotton belt. Indeed, as has been proven by its extensive production in North Carolina, Virginia, Maryland, Tennessee and Kentucky, it is able easily to stand our climate as far north as the northern boundary of Illinois and Indiana.

The soils best suited for the soy bean are fairly fertile loams, clays and sandy soils. Very rich lands are likely to cause excessive stalk growth and meagre fruiting.

The cricket has been discovered to be the grasshoppers' special foe in the Northwest.

The Stiefel Grain Co. has removed its head office from Albion, Ind., to Fort Wayne, Ind.

A solid axiom—"Avoid extreme opinions on an incomplete situation."—E. W. Wagner.

All grain warehouses in Washington must now take out licenses, the fee for which is \$1 each per year.

Owing to a shortage of sacks, the Seattle Grain Co. has been shipping wheat from country stations in bulk to the Coast.

Rochelle, Ill., sent to Chicago samples of new corn, fully matured, on August 25. Central Indiana sent samples on August 29.

The Corn Products Refining Co. works at Waukegan renewed operations after a six weeks' shut down at six o'clock Friday morning.

Montreal fears that until the fall of 1912 the port will be handicapped for want of elevating room to handle the grain pointing that way.

New Orleans exported 136,650 bus. of corn in August. All to the West Indies and Latin America, and 304,666 bus. of wheat to the continent of Europe.

The first Canadian wheat to be shipped to Superior this year was inspected on August 29. There were three cars of the Dominion grain graded in this city.

Winter wheat experiments in North Dakota seem to have been quite satisfactory, even as far north as Devils Lake, where 20 bus. per acre was reported, cut early in August.

The first new wheat to go abroad from a Texas port this season was 32,000 bushels shipped to Hamburg on the Cheruskia, which arrived at Port Arthur on August 14.

The first trade of new corn was made at Minneapolis on August 15, 5,000 bushels No. 3 yellow corn to arrive in December, 55½¢, on basis of 6c under Chicago December corn.

A press report of August 28 says that the first cargo of grain that has left Sandusky in twenty-five years sailed that night bound for Montreal aboard the barge Melrose. It was taken on at the Baltimore & Ohio Railroad Company's elevator, where it was assembled the previous week.

It is estimated that North Dakota will harvest 80,000,000 bus. of wheat, the greatest yield in the history of the state with the exception of 1909. In Richland and Ransom Counties there is about ten times as much corn growing as ever before and the condition is excellent.

The quantity of grain that reached Minneapolis during the three days ended August 30 broke all records for the last eight years, 595 carloads having arrived over the Great Northern road. The consignments came principally from Minnesota points, as grain shipments from North Dakota had not then reached any great proportion owing to weather conditions. A total of 715,000 bushels of grains was brought to Minneapolis on all roads during the three days.

IN THE COURTS

Nels Enge, a grain dealer and president of the Nels Engle Grain Commission Co. of Minneapolis, Minn., recently filed a petition in bankruptcy, placing his assets at \$87,271.96 and his liabilities at \$158,058.90. Frank H. Peterson has been named trustee in bankruptcy.

Fred Brown, receiver for the Farmers' Elevator Co. of Langford, S. D., has been authorized by the court to pay 50 cents on the dollar on storage certificates for wheat stored in the elevator at the time of the failure of the institution. In time it is expected that the creditors will be paid in full.

A judgment of \$112.57 was recently ordered by the district court of Fairmont, Minn., in favor of the Alliance Elevator & Milling Co. in the case of George Lester, as receiver for the Alliance Elevator & Milling Co., against E. C. Klatt. The action was brought to recover two shares of stock held by the defendant in the Sherburn Alliance Elevator.

Judge James D. Elliott of the United States Court in Sioux Falls, S. D., recently decided in the bankruptcy case of John E. Carlson, who was in the elevator business at Emery, S. D., that life insurance policies to the amount of \$5,000 are exempt from the claims of creditors, unless assigned to them, when the wife or minor children are the heirs.

Clarence S. Briggs has brought a damage suit against Joseph Fishencord for \$600. Mr. Briggs recently contracted with Mr. Fishencord for 200 tons of alfalfa to be delivered to him at \$8 per ton, which the defendant, it is alleged, failed to do, thereby embarrassing Mr. Briggs, who had sold the alfalfa at \$11, presuming that delivery would be made.

The claims of stockholders in bankruptcy proceedings against Sherman R. Norris, former president of the Minnesota Grain Indemnity Co. of Minneapolis, were recently thrown out by Alexander McCune, referee in bankruptcy, who holds that the shares in the company were gambling contracts. Mr. Norris has a \$50,000 damage suit pending against the shareholders for alleged conspiracy to ruin him.

Ben C. Thomas, who owned an elevator at Columbus, Ind., is being sued by Mrs. Albert W. Blessing and others, who carry on business under the name of The Brevoort Farm, and Bert Setzer, a tenant on the farm, for \$1,500, alleged to be due on a contract. The plaintiffs harvested 1,520.9 bushels of wheat, three-fourths of which they stored in the defendant's elevator. After the burning of that structure the proprietor refused to make good the grain despite the fact that the contract carried an insurance claim.

An appeal has been made from the Interstate Commerce Commission to the United States Commerce Court by the Louisville & Nashville Railroad Co. in the matter of transit privileges in grain and grain products from Nashville to Atlanta and other Southern points, which the Commission ordered stopped September 1. About 400,000 tons are re-shipped yearly, which would represent a considerable loss if the order stood. The Nashville Grain Exchange and the Nashville Board of Trade have joined with the Railroad Company.

ARBITRATION DECISIONS

The following arbitration decisions were kindly furnished by Sec'y G. J. Gibbs of the Texas Grain Dealers' Association:

Texas Grain & Elevator Co., plaintiff, vs. Ft. Worth Grain & Elevator Co., defendant.—In this claim for \$40.67 are involved two separate and distinct transactions:

1. Plaintiffs purchased from defendants a certain lot of wheat on Ft. Worth weights. The evidence submitted shows that no certificates of weight were furnished by defendants, and it developed that the weight by the mills who received the wheat at destination showed a small shortage, amounting to a total of \$13.51. The committee holds that it was the duty of plaintiffs under this contract to have furnished certificates of weight with the other papers, and that their failure to do so renders them liable to defendants for the amount of the shortage.

2. In this case plaintiffs bought a lot of wheat from defendants at a specified price delivered, basis Group 1 points in Texas, agreeing to specify to defendants destination when the wheat was ready to be loaded. There is no written evidence furnished the committee as to what these instructions were. It appears that through some misunderstanding one of the cars was billed to San Antonio. When defendants tendered this bill of lading, plaintiffs refused to accept it, stating that they, the plaintiffs, ordered the wheat to go to Galveston. To this, it appears, defendants made no objections, but proceeded to deliver the bill of lading to the railroad company, and secured from the railroad company in its stead a diversion order, showing that defendants had instructed that the car be diverted to Galves-

ton. On receipt of this document, plaintiffs then paid for the wheat.

Later it developed that the car arrived at San Antonio and that the railroad company declined to make the diversion. Plaintiff then tendered to defendants the papers for this car of wheat and demanded that they be refunded the amount paid to defendants. This demand was refused, defendants claiming at that time they had used their best efforts to get the car diverted and were not responsible for the failure of the railroad company to comply with their request that this be done. Plaintiffs then proceeded to sell the car, which was done at a loss of \$27.16, and make claim on defendants for this amount.

It appears to the committee, from the action of defendants when plaintiffs refused to accept the bill of lading, showing San Antonio as destination, that they, the defendants, recognized an obligation to deliver the car of wheat at Galveston, and, in the absence of any evidence to the contrary, the committee holds that this obligation rested upon the defendants, and that they, the defendants, are properly chargeable for whatever loss accrued to plaintiffs by failure to ship the wheat to Galveston.

We, therefore, find in favor of the plaintiffs for the amount claimed, and hereby order the Ft. Worth Grain & Elevator Co. to pay to the Texas Grain & Elevator Co. at Ft. Worth, Texas, \$40.67, and instruct the secretary to return to the Texas Grain & Elevator Co. their deposit fee in this case. C. L. Moss and E. W. Rollow, Committee.

NOTE.—The above was appealed to the executive committee and on March 15, 1911, the finding of the arbitration committee was sustained as above set forth.

G. J. GIBBS, Secretary.

CANCELLED SALE OF MEAL, ETC.

Smith Brothers Grain Co. vs. Keel & Son.—T. M. Sleeper and A. D. Crouch, committee.

Claim filed before the arbitration committee of the Texas Grain Dealers' Association by Smith Bros. Grain Company of Fort Worth, Texas, against Keel & Son of Gainesville, Texas, wherein plaintiff seeks to recover the sum of \$36, alleged to be due from defendants by reason of their refusal to receive a carload of mixed cotton seed meal and hulls sold to J. F. Kelsey, manager for defendants at Miles, Texas. The plaintiff was represented by Bert K. Smith and the defendants by J. Z. Keel.

The testimony shows that on Sept. 19, 1910, plaintiff sold to J. F. Kelsay, at Miles, Texas, 200 sacks mixed cotton seed meal and hulls at \$16 per ton delivered Miles, Texas, the said Kelsay being then the manager for Keel & Son at Miles; but it appears that plaintiff did not know Kelsay was connected with Keel & Son at the time the sale was made. Plaintiff quoted on the request of said Kelsay, made by postal card, dated Sept. 17, 1910, which card was signed J. F. Kelsay. The sale was made by telephone Sept. 19, and plaintiff duly confirmed same to J. F. Kelsay by mail on the same date. There is no confirmation of the deal either by Kelsay or Keel & Son.

The testimony before us discloses the fact that on the afternoon of Sept. 19, 1910, plaintiff and defendants had a conversation over the telephone concerning a claim made by defendants on plaintiff regarding some damaged crops, and that in this conversation, defendants told plaintiff to cancel the car of mixed cotton seed meal and hulls sold to their manager, Mr. Kelsay. Plaintiff declined to cancel the Kelsay order, unless defendants would pay plaintiff the profit of \$1.50 per ton, the car having been purchased by plaintiff from Terrell Cotton Oil Co. at \$14.50 per ton delivered Miles, Texas. The defendants declined to accept this proposition, contending that Mr. Kelsay was authorized to make purchases of grain only subject to the confirmation of defendants.

Plaintiff thereupon shipped the car to Miles, Texas, and it was refused by defendants. After considerable efforts to get a settlement, plaintiff forwarded the car to Brownwood, Texas, and made disposition of same at a loss of \$36, and presented bill for same to defendants, payment of which was declined.

After carefully considering all the facts and testimony presented, we are of opinion that plaintiff had a valid contract of sale with J. F. Kelsay, Manager for defendants at Miles, Texas, and that defendants had no right to cancel same on Sept. 19, 1910.

We also hold that plaintiff was in error when the car was shipped to Miles, Texas, after defendants had cancelled the deal. We think plaintiff should have sold the car for the account of defendants at point of shipment and thereby have avoided the necessity for forwarding the car from Miles after its refusal as above stated.

We will therefore hold that plaintiff is entitled to receive the original profit at \$1.50 per ton, and will divide the cost of arbitration, and assess one-half to each party.

It is therefore ordered that Keel & Son promptly pay to Smith Bros. Grain Co. at Fort Worth, Texas, the sum of Fifteen (\$15.00) Dollars, and the secretary is directed to return one-half the deposit fee of each party.

TRANSPORTATION

Light demand for lake tonnage for grain for immediate movement.

Ocean freights from Montreal advanced on Sept. 1 3/4c per bushel on wheat.

Illinois River boat traffic in grain and fruit has been heavier this season than for many years.

The C. & N. W. Ry., effective Sept. 12, gives Sioux City the transit privilege, the stop not to exceed six months.

New adjustments of rates have again opened the Kansas City and Southeastern grain markets to Nebraska shippers.

The G. N. has just completed at Minneapolis a new yard to take 700 grain cars, with an annex for distribution to take care of 750.

The M. & St. L. will be extended into Canada to move grain into the States for distribution, via Iowa Central, Alton and Maple Leaf lines.

New joint grain rates have been made by the O. W. R. & N. Co. to Sound from eastern Washington in effect Aug. 25, and from points outside the state on Oct. 1. There rates are the same as those to Portland, Ore. The Harriman lines will make the same concessions, in effect Oct. 1.

The crowded condition of the grain elevators will call into service many lake boats to load grain at Chicago, Fort William and Duluth for winter storage. Up to Sept. 1, 2 1/4c for wheat for storage at Buffalo after Nov. 15 was the best offer at Fort William, but oats paid 3c as a rule and corn 3 1/2c at Chicago till spring, with optional delivery at Buffalo. There is a large quantity of oats and corn already on board at these rates.

An extension of sixty days has been granted Nashville grain interests by the Interstate Commerce Commission in the case of Duncan and others against the Nashville, Chattanooga & St. Louis Railway and others, which involves the grain reshipping privilege. The Commission's order for the withdrawal of the privilege was to have taken effect Sept. 1. The extension is granted to give the Nashville grain interests and railroads interested opportunity to appeal from the order to the United States Court of Commerce.

BILL OF LADING LEGISLATION.

At the recent meeting of the Council of Exchanges, W. M. Hopkins, manager of the transportation department of the Chicago Board of Trade, made a report on the status of the bill of lading legislation. Mr. Hopkins then recommended that, "instead of following the old practice of reciting the disadvantages of an improper bill of lading, and passing resolutions favoring an improved form, positive action should be taken to secure by Congressional enactment a safe document, fair alike to the owner of the property and the carrier. With this in view there should be properly prepared desirable amendments to the measure now before Congress, and their adoption strongly urged. Failing in this, then an effort should be made to pass the Stevens Bill, H. R., 4762, as introduced, which at least makes the carrier responsible for the bill of lading, whether issued fraudulently or as a matter of accommodation, without receiving the goods, also insures its integrity when in the possession of a bona fide holder."

The Stevens bill in its present form, Mr. Hopkins says, is better than in its original form; but in his opinion, it still needs amendment along certain lines. For example, he says that the bill now contains a provision concerning shipper's load and count, whereby the carrier shall not be liable for the non-receipt, or for the misdescription, of the goods described in the bill. It would be more reasonable to have this provision read that, "The carrier shall not be liable for goods not received by it, or by the misdescription thereof, as set forth in the bill." This would hold the carrier for such goods as it receives, and of the description, if proper; but not hold it, under shipper's load and count, for goods which it did not actually receive, or a class of goods wrongfully described in the bill of lading. While it is admitted the carriers should not in every case be made responsible for shipper's load and count, nevertheless they should not, by legislative enactment, be relieved of every and all responsibility in connection with it.

Again, he says: "The bill of lading states that the merchandise is 'received subject to the classification and tariffs in effect on the date of issue.' Amendment should be proposed whereby no classification rule should at any time modify or annul the conditions of the bill of lading, or otherwise affect it. There should also be provision in the act whereby carriers should not be exempted from liability for losses by fire after forty-eight hours' notice of arrival, or for loss or damage occurring while the property is stopped or held in transit upon the request of the shipper or owner. The condition in the bill of lading that a claim for loss should be based upon invoice price at point of shipment, is unfair and unreasonable, as the real value of the

property is the cost of replacing it. There should be also a provision prohibiting carriers from changing or nullifying the provisions of bill of lading by stamping other conditions upon the face thereof."

If, however, Mr. Hopkins suggests, "if it should appear that an attempt to amend the Stevens bill is likely to hamper or endanger its passage, it would be wiser to facilitate its enactment in present shape, rather than delay needed legislation, and after its enactment a complete national code on bills of lading can be formulated, and its passage by Congress urged. In any event, there is little to be accomplished by simple resolutions or protests concerning the bill of lading matter; more practical methods are demanded."

LEAKY CAR PROBLEM.

Sec'y Plumb of the Milwaukee Chamber of Commerce has addressed the following letter to the railway companies entering that city:

"The chief weigher of the Milwaukee Chamber of Commerce has recently made some investigations into the matter of leaking grain cars and has given the results to the Weighing Committee in the form of a report which is believed to embody some valuable observations. The Committee has directed me to communicate these observations to you.

"The subject of defective and leaking grain cars is a most vital one; and while I am not able to give exact figures showing what proportion of all grain laden cars arriving at Milwaukee are leaking upon arrival, the percentage is probably 15 to 25, and it is thus seen to be a serious matter, both for the railroads and the shippers.

"Mr. Clapp, the chief weigher of the Milwaukee Chamber of Commerce, speaks very strongly of the necessity of more care being taken to see that a car is in proper condition before it is loaded, and recommends the free use of hurlap and oakum to patch breaks, stop cracks, etc. The majority of leaks are caused by loose or broken sheathing at the sills; and particular attention should be paid to this part of the car when loading, as it is very often a simple matter to remedy such a break by the use of a few nails or burlap fastened with boards. Another cause of much trouble are cracks at corner posts above the lining. Mr. Clapp says that a great many serious leaks occur here, and urges that burlap or cotton cloth be fastened so as to cover the cracks and reach well above the highest point of the load.

"Attention is called to the importance of having the grain doors double and well braced at the center to prevent bulging, which is a frequent source of leaks, due to the pressure of the grain, which allows it to leak from the car at the middle of the grain door. The end doors should be fastened on the inside to prevent thieving, and should be hoarded to top of the casing. This prevents grain from being thrown out at the top during switching, etc.

"Mr. Clapp says: 'The fact that a car is new, with steel sills, does not insure its reaching destination without a leak, as the flooring of some of these cars is made of lumber that is not thoroughly dry, and after being in service awhile it shrinks away from the end sill, leaving a crack. Some of the planks are too short and do not reach the sill.' Such openings are very easily covered and should be.

"It is the opinion of Mr. Clapp that if precautions are taken along the lines suggested, and the proper care is shown in the safeguarding of such valuable property, probably 75 per cent of the losses from leakage would be prevented. This means a great deal. It means that the claim departments of the railroads would be relieved of a great part of their burden, and it means more satisfactory relations between railroads and shippers. One shipper has written to his commission man at Milwaukee that he has spent thus far \$25 for materials used in making repairs upon cars, which were necessary before he could safely load his grain for shipment, and he complains strongly at being obliged to spend money to put the equipment of the carrier in a serviceable condition and in addition being compelled to pay the carrier the full tariff charges. Is it, then, not true that it is unjust to require a shipper to not only pay for the material necessary to put the property of the carrier in condition to carry his goods and then have to make the repairs himself?

"This brings up a suggestion that I want to place before the transportation companies, viz.: Is it not possible, and also entirely fair, for the railway company to furnish such materials as may be necessary to repair a car so that it will safely transport grain, etc., with the understanding that the shipper will furnish the labor and see that proper repairs are made? Would not such an arrangement pay for itself in the reduced burden borne by the claim department?

"The Chamber of Commerce would be pleased to have the views of your company on this subject."

The new crop movement began at Duluth about August 26, with only about 50,000 bushels old wheat in store.

The CO-OPERATIVES

The Farmers' Elevator Co. of Claremont, S. D., paid 10% on last crop.

The Finley Farmers' Elevator Co., Finley, N. D., has gone into bankruptcy.

The Farmers' Elevator Co. of Plymouth, Ia., made profits last year of \$4,890.64.

The Farmers' Co-operative Society at Sheffield, Ia., handled 222,395 bus. of grain and \$32,193.65 of cash.

The Luxemburg Grain Co., (co-operative), Luxemburg, Wis., paid a dividend on last year's crop; amount not stated.

The Barry Farmers' Elevator Co., Barry, Minn., has been in trouble with a shortage, but the house will be kept open by a new manager.

The Farmers' Co-operative Grain and Trading Co., Bowbells, N. D., which has been trying to get into business, owing to the apathy of the members has postponed action indefinitely.

The Farmers' Co-operative Ass'n of Alcester, S. D., paid a dividend of 8% and put 12% into surplus. The Association handled 340,000 bus. of grain, 4,500 hogs and 45 cars of coal.

The Langford Farmers' Elevator Co., Langford, S. D., has gone into the hands of F. J. Brown of Britton as receiver. Later he was ordered by the court to pay 50 cents on the dollar on storage certificates for wheat stored in the elevator at the time of the failure, and in time it is expected creditors will be paid in full.

The Farmers' Educational and Co-operative Union of Washington established agencies for buying grain direct from the farmers, to be handled through the Farmers' Union Terminal Warehouse Co., which conducts warehouses at Portland, Tacoma and Seattle. C. W. Nelson, selling agent, headquarters at Seattle and Tacoma the past two years, made trips to Europe last summer to try to arrange for European backing for the Union and to arrange for selling grain direct to the mills of Liverpool and European milling cities.

The manager of the Farmers' Elevator Co. at Andover, S. D., on August 14 was found to be short between \$15,000 and \$20,000. It had paid for several years dividends of 20%, but the trouble was found by an apparent discrepancy between the amount of grain on hand and the outstanding storage certificates. The latter called for 34,000 bushels of grain, when it was found there were but 7,000 bushels in the elevator. It is stated that the company owed \$15,000 to the bank, which with the grain storage certificates outstanding brings its total outstanding indebtedness to about \$40,000, to offset which is the elevator building, worth \$12,500, and there is about \$9,000 in outstanding accounts, making the net discrepancy between \$15,000 and \$20,000. Later a settlement was arranged between the stockholders and the creditors, by which the creditors agreed to take 50 cents on the dollar in cash and the other 50 per cent in elevator stock, to be paid out of the earnings of the company, the company to pay no dividends until the indebtedness is paid. The bank accepted notes from the directors to secure \$9,000 due it and provided for the settlement of an overdraft of \$6,000 by taking \$3,000 in cash and \$3,000 in stock. In time, therefore, the creditors will be paid in full, but it may take several years to accomplish it.

ADKINS ON THE STUMP.

Speaker Adkins, on August 25, made a speech at a farmers' picnic, near Danvers, a report of which has been published by the Blomington Pantagraph of recent date, from which the following is taken:

[After some preliminaries he took up] the history of the movement for establishing the farmers' co-operative elevators, in which he himself had taken a leading part in Illinois. Disaster was predicted, he said, for this movement at its start, but the farmers found that they had got to stick together because they had been stuck so many times in other ways. Ten or twelve years ago this movement began to take shape, and many of these present, the speaker said, would remember the bitter fight which was made against it. First, it was a fight to get into the markets with the grain from farmers' elevators. The regular dealers and hoard of trade men banded against the co-operating of farmers and their shipments of grain stood upon the track many days at the terminal because the regular dealers would not touch them. Mr. Adkins said that this opposition had been overcome and now the main instigators stoutly deny that they ever had anything to do with it. The speaker said that he did not know of any one factor except co-operation among farmers which could have throttled the grain trust as this has done. Had it not been for the growth of the co-operating movement, every line of roads would have now been lined with a string of elevators all owned by the same people and the entire grain market would be in the hands of fewer men than are the fingers of one hand. As the heroes of the Revolutionary War are revered

and honored and the heroes of the Civil War likewise lauded, so the pioneers in this movement for the freedom of the farmers from the clutches of the middlemen will be deserving of gratitude at the hands of their posterity.

Politicians as such had nothing to do with this movement among the farmers which has resulted so beneficially. They generally point out the terrible existing conditions, but few of them are willing to suggest a remedy. The farmers' co-operative elevators starting out on a basis which lacked much of business soundness, are now generally on a substantial business basis and have come to stay. The problems of buying on greater margins than this business sense would dictate, and the other details which have been fronting the managers from time to time, have been generally worked out and a scientific business management has been evolved.

However, the movement is not yet without its dangers. The old opposition is approaching the farmers at a different angle and is now trying to absorb the farmers instead of trying to oppose them.

CAUSE OF HIGH COST OF LIVING.

Coming upon the always live topic, the high cost of living, Mr. Adkins said that none of the writers that he had seen treat of the question had got down to its real foundation. He illustrated his meaning from a couple of examples from his own experience. In his own town there used to be a mill to which all the surrounding farmers brought their grain, and from which they secured their flour for their families need. The town also got its supply of flour from the same mill. Long ago this mill had been put out of business by the gigantic combination of milling interests working with the railroads. Now what is the condition? The farmer must ship his grain to Chicago, where it is in turn shipped to the mill; the mill grinds it and sells it back to the community where he lives, through several middlemen. The railroads get their freight both ways and all middlemen must have their profit. Consequently when the product reaches the consumer it must necessarily be several times higher than it was when the farmer was the only middleman.

The second instance was that of the speaker himself selling his hired man on his farm two hogs for \$61. These hogs were butchered by the men with the assistance of two other day laborers who were called in. After dressing the porkers, it was figured up that by selling the hams, shoulders and sides, the owners could realize the cost of their hogs and they would still have about \$40 or \$50 worth of lard, hackhoney and other parts of the hogs for profit.

But the two day laborers, were required to pay at least twice the rate per pound for pork which the owners of these hogs were willing to accept. This was figured out because the farmer who sells his hogs to a dealer turns them over to a middleman who takes them to Chicago, where they are slaughtered and shipped back in the form of dressed pork to the town whence they first came. Consequently there are two freights to pay besides the middleman's profit and it is no wonder the dressed meat of the local butchers cost twice what the farmer could sell it profitably for.

HOW FARMERS ARE THWARTED.

Speaker Adkins next went into the subject of legislation for the benefit of the farmer and showed how any efforts at legislation along that line are balked by the great city interests illustrated by one example in the last legislature, where a bill was introduced and passed the house legalizing co-operative organizations, such as farmers' elevators. When it reached the senate, it struck a snag on account of the control of the body by the Chicago Board of Trade interests. They brought back word to the house that the only condition on which the farmers' bill could pass the senate was that the house in turn would pass a bill legalizing the worst forms of gambling on the Board of Trade and removing the restrictions which now hedged in the Board of Trade operators. Promoters of this bill came down in cohorts from Chicago and used every method of bulldozing to secure its passage. The speaker said that he stoutly opposed it and urged all his friends to do so. As a final argument for him, word was brought that if he would permit the passage of the Chicago Board of Trade bill it would mean 30,000 votes for him for governor from those interests. He replied that if the governorship were assured him on such conditions, he would not accept it. He characterized the professional Board of Trade operators as "business-pirates" and the cause of more physical and commercial wrecks than any other kind of institution. If some of their dealings are to be legalized, it will be just as well to legalize the crap game and the poker table.

In passing over this subject, Mr. Adkins said the farmers' bill might have passed the senate and become a law if there had been any man in the senate who was game enough to put up a fight for the farmers' interests and had had the nerve and sass to tell the Board of Trade sharks where to get off. One of the leading men who smothered the farmers' bill in the senate is now the candidate for the so-called progressives for governorship and is hanging his picture around the state with the inscription "Give the people a chance."

PERSONAL

H. S. Kennedy, a well-known miller, will have charge of the milling wheat department of the Kemper Grain Co. of Kansas City, Mo.

Girvin & Eyre, grain exporters of Portland, Ore., operating under the style of Northwestern Warehouse Company, having dissolved partnership, Charles E. Curry, manager of the company's Portland elevator for the past 13 years, has taken the management of the Tri-State Terminal Warehouse Company.

NEW APPOINTMENTS.

J. E. Terney has charge of Power's Elevator Co.'s elevator at Gorman, N. D.; E. O. Dickinson is manager of elevator at Bantry, N. D.; Hugh Bryan, formerly grain buyer for Eagle Roller Mill Co. at Gettysburg, S. D., now buyer for the National Elevator Co. at Winnipeg, Man.; O. A. Osdahl has charge of Jordan Elevator at Taopi, Minn., leased by Cronan & Eastman; G. W. Bitzer will have charge of elevator at Conde, S. D.; L. A. Hagen is manager Farmers' Elevator at Hecla, S. D.; H. C. Maurer is buyer at old elevator in Glenbeulah, Wis.; Albert Anderson has taken former position as buyer at Farmers' Elevator at Doyen, N. D.; C. E. Jaberg has charge of N. J. Olson's elevator at Hobart, N. D.; R. G. Elwood, formerly manager of Monarch Elevator at Grand Forks, N. D., is manager of Grand Forks Elevator of the Duluth Elevator Co.; B. J. Schneider is with St. Anthony & Dakota Elevator Co. at Pisek, N. D.; J. F. Gamber is buyer for Eastern Montana Elevator Co. at Terry, Mont.; Chris Wold, elevator agent at Murray, N. D., succeeds S. P. Bunn as agent for Mayville Farmers' Elevator at Mayville, N. D.; Fred Brown is manager Powers' Elevator at Hebron, N. D.; Ben Jansseu succeeds John Stutelberg as agent for Northwestern Elevator at Clara City, Minn.; Nels Evanson has charge of elevator at Buxton, N. D.; J. A. Fielder has charge of elevator at Aldrich, Minn., for B. H. Pettit; Bloom Ramsey has taken charge of the Curtis Grain Elevator at Greenview, Ill.; A. Argall took charge of Swanson Elevator at Beach, N. D.; L. B. Duncanson is manager for Occident Elevator Co. at Mott, N. D.; Henry P. Peterson of Superior, Wis., has entered the grain business; Adolph Witasek is buyer for Atlantic Elevator Co. at Lankin, N. D.; Sam Schell will operate the Burgess Elevator at Edmore, N. D.; George Dillingham will manage the elevator at Granite Falls, Minn., for the Red Wing Milling Co.; Ben Timmer is buyer for St. Anthony & Dakota Elevator Co. at Granville, N. D.; W. A. Pannebaker has charge of elevator at Glover, N. D.; R. O. Smith is buyer for the Blankenburg Elevator at Oakes, N. D.; Ed. Dreher, formerly manager of Independent Grain & Lumber Co. at Dike, Iowa, again takes charge of elevator at that place; Ernest Christenson has taken position in elevator at Mapleton, N. D.; S. B. Stockwell is manager of Farmers' Elevator at Wakonda, S. D.; Calmer Torstenson succeeds E. O. Pederson as buyer for Northwestern Elevator Co. at Battle Lake, Minn.; E. O. Pederson will buy grain at Edinburg, N. D.; Herman Mittag, formerly with the Monarch Elevator Co. at Worner, N. D., is buying grain at Brickenridge, N. D.; Paul Berndt is manager of Monarch Elevator Co. at Worner, N. D.; Dan S. J. Leif is buyer at elevator in Sanborn, N. D.; William Drummond is buyer for the Acme Elevator Co. at Esmond, N. D.; C. H. Nass is new buyer at Federal Elevator in Esmond, N. D.; Joe Kohloff has closed Ferney Farmers' Elevator at Groton and is buyer at Elgin, Man.; Jim Armstrong will have charge of O. & M. Elevator at Bordulac, N. D.; James C. Hayden, formerly with the Osborne-McMillan Elevator Co., has taken charge of the Leal Farmers' Exchange at Leal, N. D.; Ole Knutson of Eglon is buyer at Monarch Elevator in Ulm, Minn.; Henry R. Dufoth of Omaha, S. D., succeeds D. K. Danielson as buyer for Pacific Elevator at Dawson, Minn.; W. T. Cummins has taken charge of National Elevator at Reynolds, N. D.; Mr. McGrevey has charge of Great Western Elevator at Blanchard, N. D.; W. O. Persons has charge of Farmers' Elevator at St. Charles, Minn.; Mr. Grinder has charge of Hennepin Elevator at Galchutt, N. D.; Bernie Hanson is buyer for Crown Elevator Co. at White Rock, S. D.; Ben Eppler, formerly grain buyer at Blackmere, will buy for Occidental Elevator Co. at Deisem, N. D.; A. J. Carter is manager of Occident Elevator at Bowbells, N. D.; Gale Whitney will take charge of Golden Valley Independent Grain Co.'s elevator at Chama, N. D.; George Elliott has been promoted to management of the Golden Valley Independent Grain Co.'s elevator at Beach, N. D.; W. J. Canfield will manage elevator for McCabe Brothers at Brandon, N. D.; P. Vanderberg is manager of Farmers' Elevator Co. at Sherman, S. D.; Otto Wamsley has position with Osborn McWilliam Elevator Co. at Braddock, N. D.; William Pfau is buyer for Monarch Elevator at Barlow, N. D.; Mr. Fibelstad has taken charge of Farmers' Elevator at Hayward, Minn.; John Mennes has position with Farmers'

Elevator Co. at Napoleon, N. D.; Charles L. Ward has taken charge of an elevator at Guelph, N. D.; James Hackney will represent elevator at Fallon, Mont.; Val Halger is agent for the Schmidt & Anderson Elevator at Comfrey, Minn.; A. D. Burke is manager of Farmers' Elevator Co. at Alden, Iowa; A. J. O'Neil is official agent for the Rocky Mountain Elevator Co. at Moccasin, Mont.; Charley Gustafson has charge of elevator at Hancock, Iowa; O. G. Newcomb is manager of Farmers' Elevator Co. at Rollo, N. D.; H. N. Smely is manager of Farmers' Elevator at Hickson, N. D.; H. L. Nelson is buyer for Great Western Elevator Co. at Foxhome, Minn.; E. F. Heim has charge of old line elevator at Enderlin, S. D.; E. R. Means is buyer for the La Crosse Grain Co. at Albert Lea, Minn.; H. A. Miller has position with Northwestern Elevator Co. at Grand Forks, Minn.; A. M. West is buyer for Atlantic Elevator at Stiles, N. D.; Hjelmer Anderson succeeds A. W. Sanford as agent for the elevator of A. D. Packard & Son at Sherburn, Minn.; J. H. Gullickson is buyer for Northland Grain Co. at Armourdale, N. D.; R. P. Miner has been promoted to the position of auditor of the Neola Elevator Co., with headquarters at Perry, Iowa; Iver Kaasa is grain buyer for Farmers' Elevator at Donnybrook, N. D.; J. A. Frank has charge of elevator at Minnewaukon, N. D.; James Ellis is buyer at Farmers' Elevator in Canton, Minn.; J. P. Jensen will take charge of elevator at McVile, N. D., for the Nelson Co.; A. K. Johnson is manager of Western Lumber & Grain Co.'s elevator at Glengary, Mont.; Ernest Bailey is buyer for Farmers' Elevator Co. at Mooreton, N. D.; J. H. Johnson is in charge of elevator at Dale, Minn.; J. A. Schroeder of Carson is manager of Wilton Elevator Co. at Wilton, N. D.; M. D. Martin is agent for Heising Grain Co. at Willow City, N. D.; Osmer Olson is buyer for Hubbard & Palmer Elevator Co. at Hadley, Minn.; William Crombie is manager of National Elevator at Backoo, N. D.; G. W. Torberd is agent for the St. Anthony & Dakota Elevator Co. at Hallock, Minn.; Robert Tjossen succeeds N. C. Wilkinson as manager of Farmers' Elevator Co. at Gaza, Iowa; Mr. Dale is buyer for the Royal Elevator Co. at Seal, N. D.; H. V. Nichols will buy for the Monarch Elevator Co. at Sheldon, N. D.; H. O. Miller of Anoka, Minn., is buyer for Wolford Farmers' Elevator at Wolford, N. D.; William Medsker, formerly with Kansas Grain Co., has charge of new elevator at Plevna, Kan.; L. J. Foy is manager of the Boyd Elevator at Laugdon, N. D.; L. S. Barcroft is manager of Farmers' Elevator at Rolla, N. D.; John Hanson has charge of Schmidt-Anderson Elevator at Berlin, N. D.

TIME FOR CUTTING TIMOTHY AND CLOVER MIXED.

"I do not need to tell you men that hay is a big crop," said Prof. H. J. Webber of Cornell University, closing an address to the National Hay Association on "The Improvement of Timothy and Other Forage Crops by Breeding." "If I were going to a general farmers' meeting I think it would be necessary to tell them that hay growing and timothy growing is an important crop, because we talk about growing corn and everything almost but hay. Hay is our first crop, second not to dairy products or corn or wheat—four times as much as corn and wheat—three times as much as potatoes, because potatoes next to hay, are our largest crop. We produce in the state of New York annually a valuation of about ninety-five million dollars' worth of hay and forage of various kinds, and the bulk of them is timothy. The next crop to that so far as actual crop is concerned is potatoes, of which we have about thirty million dollars annually. If, therefore, we were to assume that the introduction of these new varieties, some of the best ones, would give 10 per cent increase, it would add ten million dollars practically to the value of our crop in the state of New York alone. If that thing can be spread over the United States, and it is perfectly possible to do it, we could add very much more to the yield.

"Go to Illinois for a moment. We ordinarily want to grow clover with our timothy. Hay men like to see pure timothy and they do not want any clover in it, or anything of that kind, and the men who are buying hay in the cities want pure timothy hay. I guess I am right in saying that that is an error. I think you will agree with me that timothy with the clover in is a richer and a better hay, so far as feeding value is concerned—taking only feeding value,—than pure timothy, without question. Wherever farmers grow hay for their own use and to keep up their land, they sow clover with it.

"In Illinois these plants ripen in different seasons. If they cut it in good season, the timothy is not ripe; if they cut the timothy when it is ripe, the clover is overripe. We could correct these difficulties without the slightest trouble or cost, because we have early and late varieties. As we compare these timothies, they differ at least three weeks to a month in their time of ripening. I could send you seed of early varieties that will ripen three weeks earlier than any others, or three weeks after the late ones. If you were growing timothy on a

large scale and it was difficult to harvest—you know there is a best time to cut timothy and you should cut your whole crop in that prime condition. In other words, you should cut it while it is in bloom or immediately following the bloom. If you begin at the right time, before you get to the last field, it is overripe and the hay has deteriorated; but by using the sequence of variety you could plant early varieties in a field here, medium there and late varieties in another field, and you could begin and harvest your early varieties and go right through.

"I want to emphasize certain points with reference to the cutting time of timothy. The investigation of this subject has been primarily by President Waters of the Kansas Experimental Station. Nevertheless, the results apply here, and some of the results have been obtained from our New York hays. In inquiring among our farmers I find, as a general rule, in this state they will tell you to cut timothy when it is in the milk, or dough, stage; that is, when the seeds, if you press them together between your fingers, will throw out the interior in a sort of milky, or doughy, condition before they are fully ripe. On the other hand, the Western farmers rarely cut their timothy until it is in the dough stage, or a little past. In different parts of the country there is controversy in regard to the time in which hay should be cut. It would seem at first thought, if you cut hay when it is entirely ripe, it would be the heaviest. That is not the case. After hay passes the medium stage, when it is in the milky stage, that milky stage is almost immediately following the bloom. In the period following that stage, there is actually a loss in gross weight and also a more material loss in the intrinsic value of the hay because of its protein value.—its nutrition passes out. In other words, from the blooming period, instead of going up to the development of seed, a portion of the nutrition is transferred down and is stored in these bulbs at the base of the roots. The stronger the nutrition in the bulbs the better crop there will be next year, because the stronger will be the swelling in the base. On the other hand, as the plants mature, the lower leaves dry and scuff off. In a dry season like this, which is, of course, excessive, practically every leaf of the ordinary timothy will be dried up and dead. As the drying takes place, more or less of this material is actually lost, and the hay is reduced in value because of that drying; on the other hand, as showing the peculiar interest in this question of breeding, we can find timothy plants that under the bulb system, like the present, will all dry down—every leaf; but we may find a few plants beside them that will retain that brilliant fine breed, notwithstanding the drought, so that they will make a good crop whether they have a great amount of water or not. As I conceive, that is the best type of hay plant. I can point you out many plants, varieties of timothy, that will go until the ripening and until the seed begins to shatter off and yet their leaf will be bright and green, in which the body of the plant maintains vigor and growth until the seed actually ripens and begins to fall. That is a desirable quality because so much of our hay is actually discolored, brown and dry, because of too late culture. If we use varieties like that, a considerable part of this difficulty will be overcome."

A FLY THAT WAS SWATTED.

For seven months an expert accountant searched the books of a certain grain company of St. Paul, Minn., for an error of an even hundred dollars. There was that shortage in the cash. Whom to suspect the firm did not know. They spent much more than the hundred dollars trying to track the matter down.

And then, after having gone over the books time and again, the accountant's pencil chanced to stop at an item for \$140. The pencil point rested on the figure "1," when the figure suddenly broke in two and slid down the page!

Upon examination it proved that the supposed figure "1" was a fly's leg which had become pasted in front of the \$40, raising the item to all appearances a hundred dollars. The fly had undoubtedly been crushed in the book when it was closed.—*Ex.*

The hay crop around Grant, N. Y., is the largest in years.

The Chicago Board of Trade directory has deferred action on a proposition to make regular grain winter-stored in boats in the harbor.

September 6 the work of planting the largest wheat field ever sown in Colorado was begun near Cheyenne Wells, near the line of the Union Pacific railroad. The field contains 8,000 acres.

A prosecution has been started at Minot, N. D., against a farmer of Ward County for alleged violation of the contract by which he obtained seed wheat from the state. He is accused by the prosecuting officials with having sold seed grain that belonged to the county, or on which the county held a lien, and failing to make payment for it.

FIRES-CASUALTIES

The Van Dusen Elevator at Phillip, S. D., was burned recently.

The elevator of the Eaton Buckwheat Milling Co., at Eaton, N. Y., was burned August 16.

The elevator of the Alberta Milling Co., Ltd., at Edmonton, Alta., was recently damaged by fire.

The elevator of the Western Canada Flour Mills Co., Ltd., at Muenster, Sask., was burned recently.

S. J. Ridlout's grain store at Stetson, Me., was destroyed by a recent fire which threatened to wipe out the village.

The elevator at Glyndon, Minn., was recently struck by lightning, but prompt work saved it from the flames.

The Toberman & Mackey Co. suffered a loss of \$32,500 when its hay warehouse, together with six cars of hay on the track, burned on August 23.

Much damage was done to the large stock of grain, hay, flour, etc., carried by the De Mers Commission Agency of Tuscaloosa, Ala., by a recent fire.

Fire recently destroyed the Occident Elevator Co.'s elevator at Grano, N. D., causing a loss of \$8,000. The fire was beyond control when discovered.

Two elevators at Colman, S. D., one of which was a 20,000-bushel house, owned by the Cargill Elevator Co., burned August 13. The Cargill Elevator was empty.

A fire and an explosion of grain dust completely destroyed the elevator of the A. C. Craft Co., at Moulton, Iowa, causing a loss of \$7,000. The insurance was \$5,000.

A laborer employed at the plant of the Globe Milling Co., in Buffalo, N. Y., was recently smothered by grain when he attempted to clean out a plugged grain spout.

The Monarch Elevator at Sykeston, N. D., was recently struck by lightning and totally destroyed. The house had a capacity of 40,000 bushels and the loss will be about \$8,000.

The grain elevator of Binding-Stevens at Tulsa, Okla., was totally destroyed by fire on Sunday, August 13. The cause of the fire is not known; loss on the building and feed is \$6,000.

The Harrison & Johnson Elevator at Holgate, Ohio, was recently destroyed by a fire supposed to have started in the furnace. The house contained ten thousand bushels of small grain.

The Security Elevator Co.'s elevator at Rivers, Man., was totally destroyed by fire recently. The loss is about \$6,000, covered by insurance. There was no grain in the house at the time.

Fire of unknown origin recently damaged the building and stock of the Southwestern Feed Co., at Oklahoma City, Okla. The loss is about \$1,200. The building is owned by Lee Barnstein.

The grain warehouse of the Interior Warehouse Co., at Pullman, Wash., was recently destroyed by a fire supposed to have been caused by tramps smoking in the building. The loss is \$5,000.

The Grayson County Elevator & Grain Co.'s elevator at Van Alstyne, Texas, was recently damaged by a fire which started in the upper story of the house. The loss is about \$15,000, partly insured.

Fire recently attacked the grain elevator of J. Allen Smith & Co., at Knoxville, Tenn., but was extinguished by the automatic sprinklers. The fire was caused by a belt running over a fly-wheel. The loss is about \$500.

The grain elevator at Peterboro, N. H., and adjoining buildings, were destroyed by fire on September 7, involving a loss of about \$35,000. The fire started in the elevator, which was owned by Walbridge & Taylor.

The elevator at Willmar, Minn., owned by the Minnesota Western Grain Co. was recently destroyed by fire, together with several carloads of grain in the structure. The loss is \$30,000, partially covered by insurance.

Manager Carl Maynard, of the Rickert Elevator at Milbank, S. D., narrowly escaped injury recently when the piston rod of the gasoline engine was driven up through the floor. The engine is being replaced by an electric motor.

The elevator of the Nye, Schneider, Fowler Co., at Blencoe, Iowa, was destroyed by fire August 30, together with 13,000 bushels of grain, the company's lumber yard and coal bin. The cause of the fire is not known. The loss was \$1,500.

Between 1:30 and 2 a. m. September 3 a fire was discovered in the elevator at Bushnell, Ill., owned by George Long, who recently purchased it from the Stephen A. Hendee estate. The elevator was a frame structure situated on the C. B. & Q. railroad grounds. The fire was beyond control when discovered. There were 18,000 bushels of grain in

the building. An insurance of \$4,500 was carried on the elevator and \$6,000 on the grain.

Arthur Porter, a 13-year-old boy, was recently smothered in a bin of corn in an elevator at Paxico, Kan. The other boys who were playing in the bin, managed to escape, but failed to rescue their comrade when the chute outside the elevator was opened.

The old Wilkeson Elevator at Buffalo, N. Y., situated on the waterfront, was destroyed by fire August 24. The elevator was built of wood and had a capacity of 300,000 bushels. It was owned by the Lackawanna Railroad Co., but had not been in use for twelve years.

The five elevators at Oldham, S. D., together with the railroad station, were destroyed by fire August 29. The fire started in the elevator of the Larkin & Metcalf Elevator Co., and swept through the elevators of E. W. Ketcham, Jones Brothers, George & Brown and the Farmers' Elevator Co.

On August 19 the 75,000-bushel grain elevator of the Wellington Mill & Elevator Co., at Wellington, Kan., was burned to the ground by a fire of unknown origin. The mill building adjoining was saved, but some other buildings in town were damaged. The loss is \$35,000, well covered by insurance.

The contents of a warehouse at Cambridge, Ohio, owned by Mrs. R. H. Atkins and occupied jointly by the Stewart Feed & Supply Co., and the Guernsey Times Co., were almost entirely destroyed by a fire of unknown origin recently. Loss on the building is about \$200, while the loss of the Stewart Co. is \$1,000.

The foundation of the elevator of J. A. Marsh, at Ainsworth, Iowa, recently gave way on the south side of the building, causing it to settle at that point. It is supposed that the wind caused the trouble. The house, which was half full of grain, will have to be emptied before it can be placed on a new foundation.

A fire on September 5 totally destroyed the elevator and malt house of the L. Rosenheimer Malt & Grain Co., at Kewaskum, Wis., causing a loss of \$150,000. The insurance amounts to \$120,000. The elevator contained 110,000 bushels of new barley and there were 40,000 bushels of malt in the malt house in the process of making. The company will rebuild at once.

The elevator of the C. S. Christensen Co., at Lake Crystal, Minn., was recently burned to the ground by a fire of unknown origin, which started in the cupola of the elevator. The elevator of W. P. Marston, nearby, was partly destroyed. The loss on the Christensen Elevator is \$10,000, while that on the Marston House is about the same. Both buildings were partly insured.

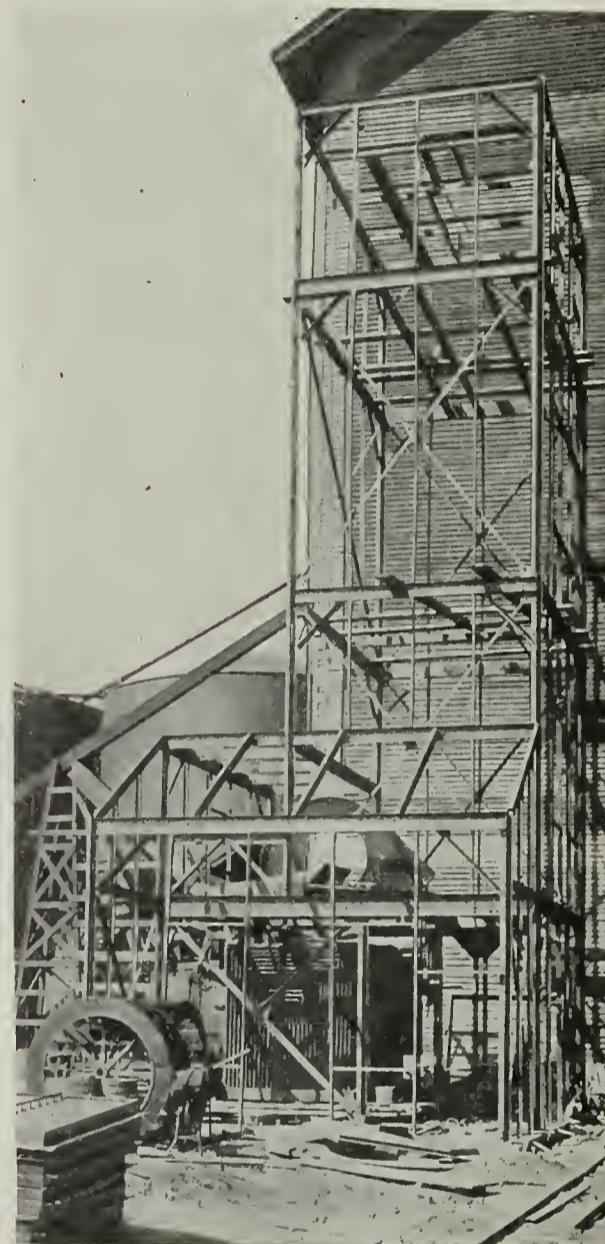
A spark from the engine room of the Lincoln Grain Co.'s elevator at Lawndale, Ill., recently destroyed the house, causing a large loss. The building, which has a capacity of 30,000 bushels, contained at the time of the fire, 10,000 bushels of wheat and 8,000 bushels of oats and over 3,000 bushels of corn. The fire, which started in the top of the structure, had already gained so much headway when discovered that little could be done. The loss is partly covered by insurance.

Six Wisconsin bankers' agricultural contests will be held in December. Arrangements have been made with the college of agriculture, University of Wisconsin, whereby instructors from the agricultural college will judge the contests, award prizes, and deliver lectures on Wisconsin pure bred seeds.

A. J. Aicklin, at Crowley, La., on September 1, bought and shipped the first car of clean rice shipped from Crowley from the new crop. The rice was bought for the account of Gordon S. Orme, of New Orleans, and came from the American Rice Mill. It was destined for export and brought a good figure.

For many weeks Russia and the Mediterranean have swept the United States, cleaning up old stocks of durum wheat, rendering durum the highest priced wheat in the world. This demand revealed the secrets of dire Russian necessity. So scared, however, was the wheat world in general of false Russian reports and a duplication of the Russian 1910-11 wheat deluge that it has taken sixty days of unchanged bad Russian news to persuade North America that she swirls the wheat value whip and can make Europe dance. The United States produces 45,000,000 to 50,000,000 durum wheat—this year probably 40,000,000 or a little less. The United States exports probably 20,000,000 durum annually. It is used for macaroni and pastry. Millers blend durum with 27 per cent of red wheat. The Continent is evidently experiencing a "durum famine." Since July 1st Russian wheat exports have dropped 30 per cent and Danubian 45 per cent. Russia is apparently detracting Danubian shipments so early in the season.—E. W. Wagner.

The Ellis Drier Co.



STEEL FRAME BEFORE COVERING

Showing steel frame work
of Indianapolis Elevator
Co.'s new drying plant at
Indianapolis, Ind. Capacity
850 to 1000 bushels per hour

It's Nature's Nearest Way

Postal Teleg. Bldg.

Chicago
U. S. A.

LATE PATENTS

Issued on August 8, 1911.

Belt Replacing Device.—Louis Ludinski, New York, N. Y. Filed February 20, 1911. No. 1,000,271.

Grain Drier and Scourer.—Peter Provost, Milwaukee, Wis. Filed January 25, 1911. No. 1,000,120. See cut.

Grain Weighing Machine.—Edgar H. Poole, Yorkville, Ill. Filed August 25, 1910. No. 999,863. See cut.

Issued on August 15, 1911.

Grain Door for Cars.—John Henry, Grand Forks, N. D. Filed August 24, 1910. No. 1,000,807.

Issued on August 22, 1911.

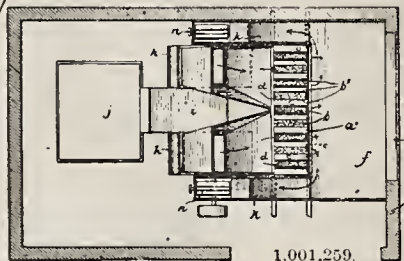
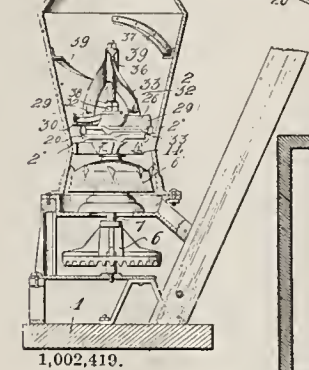
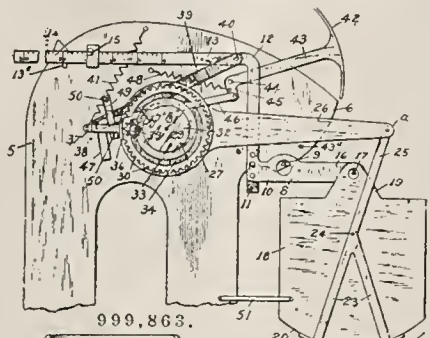
Grain Car Door.—William H. Sleep, Montreal, Que. Filed February 8, 1911. No. 1,001,468.

Grain Door for Cars.—Frank W. Hugunin, Waseca, Minn. Filed March 13, 1911. No. 1,001,036.

Belt Conveyor.—Louis Anderson, Chicago, Ill. Filed March 27, 1911. No. 1,000,974. See cut.

Drying Grain.—Wynn E. Ellis, Chicago, Ill. Filed November 2, 1908. No. 1,001,259. See cut.

Feed Blending Machine.—James A. Craig, Toronto, Ont. Filed February 7, 1910. No. 1,001,508.



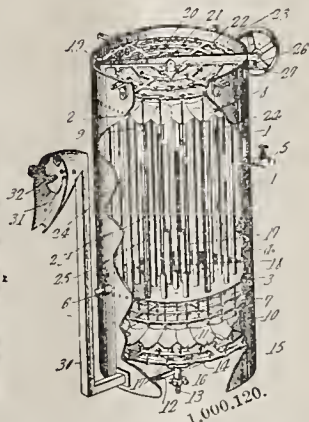
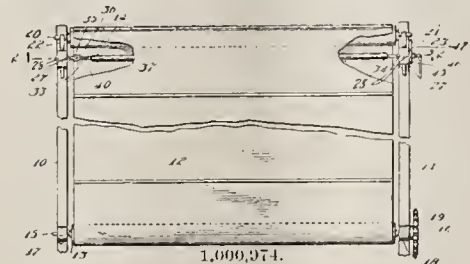
tified with it ever after. Deceased was married three times. He is survived by four children and his last wife.

John Henry Kracke, president of the J. H. Kracke Grain & Milling Co. of St. Louis, Mo., died recently at the age of 60. He was born in Charleston, S. C., and came to St. Louis 30 years ago. Mr. Kracke is survived by his wife and three children.

James C. Scott, a former resident of Marseilles, Ill., died on August 19 at Alameda, Cal., at the age of 59 years, from heart trouble. Before leaving Marseilles he was engaged in the grain business. Deceased is survived by his wife and one son.

A. L. Schulenberg, formerly of the firm of Schulenberg & Weber in Huntington, Ind., but more recently engaged in the grain business in New Haven, Ind., died recently from an attack of heart trouble while on the street. He is survived by his sister and his mother.

William P. Browne, a retired grain man who was making his home in Oak Park, Ill., with his son, died recently at the home of his daughter in Gilman, Iowa, while on a visit. Mr. Browne was born in Maine June 19, 1825, but left his native state when 25 years old. After residing at various points in the east and west he engaged in the grain business at the present town of Tama, Iowa, for fifteen years. Later he went to Franklin, Nebr., embark-



Proportioning Weighing Machine.—Robert M. Cardwell and John B. Tholen, Terrell, Texas. Filed September 8, 1910. No. 1,001,503.

Issued on August 29, 1911.

Grain Door.—Oswald Macfarlane, Toronto, Ont. Filed February 17, 1911. No. 1,001,871.

Seal for Car Doors, Etc.—John J. A. Miller, Denver, Colo., assignor to the Harpoon Seal Co., Denver, Colo. Filed August 15, 1910. No. 1,001,878.

Issued on September 5, 1911.

Grain Car Door.—George Paget, Charles E. Paget, and Arthur E. Paget, Huntsville, Ont. Filed November 2, 1909. No. 1,002,436.

Grinding Mill.—Lorren B. McCargar, St. Joseph, Mo. Filed April 24, 1911. No. 1,002,419. See cut.

Seed Cleaner and Grain Separator.—James C. Benson, Troy, Ohio. Filed May 15, 1911. No. 1,002,555.

OBITUARY

J. M. Danielson, a pioneer grain buyer of Minnesota, died recently at Red Wing, Minn.

Andrew W. Woodall, a member of the Baltimore Chamber of Commerce and a pioneer in the Southern or Bay grain trade of Baltimore, died recently at Georgetown, Md., aged 58.

Oscar C. Stafford, an inventor of grain elevator supplies, and for some time a resident of Springfield, Ill., but more recently in the hardware and stove business at Minneapolis, died recently at the age of 82.

George W. Munger, lumber and grain dealer of Pilger, Nebr., together with S. H. Haphel, was killed recently in an automobile accident. Mr. Munger was mayor of Pilger. He is survived by a wife and seven children.

Monroe Elias Ballou, one of the leading manufacturers of Becket, Mass., died recently at the age of 75, following a stroke of paralysis. Mr. Ballou was born in Peru in April 14, 1836, and upon reaching his majority entered the milling, grain and feed business in partnership with his father, being iden-

ing in the same business. In 1898 he went to Belle Plaine and in 1902 he retired. Deceased is survived by five children.

S. W. Pierce, a prominent grain man, died recently at Superior, Wis., after suffering two strokes of paralysis. Mr. Pierce was 69 years of age and a member of the G. A. R. Up to the time of his death he was connected with the Thomas Gibson grain firm of the Duluth Board of Trade. Deceased is survived by his wife and four daughters.

H. D. Benedict, a well known citizen of Gridley, Ill., died recently from an abscess on the lungs. He was born in Waldo Township, Livingston County 53 years ago, and for twenty years was a farmer. At the end of that time he became a carpenter. Three years ago he assumed the management of the Farmers' Elevator, which office he resigned recently on account of ill health. Deceased is survived by five children, three brothers and his mother.

Captain John H. Hanna, a pioneer grain merchant of New Orleans, La., died recently at Toronto, Canada, while on a trip with his daughter. Mr. Hanna was born in Londonderry, Ireland, on May 24, 1835; and after receiving his education and serving as an apprentice in a grocery, he came to this country in 1852. He soon became connected with Sands Brothers, receivers and agents for the largest produce house in New Orleans. After learning the grain business thoroughly he branched out for himself, soon gaining the name of "corn king of New Orleans." Deceased is survived by four children and a number of grandchildren.

Frank A. Burnell, a pioneer and grain merchant of Denver, Colo., died recently at the age of 63, after an illness of three weeks. Mr. Burnell was born at Wiscoy, N. Y., on February 19, 1848. When nineteen years old he came west and was employed in teaming for the Government. Later he became connected with W. J. Barker and Sam B. Morgan, grain merchants of Black Hawk, Colo. In 1876 he went to Denver with Mr. Barker, to continue the grain business. A few years after his marriage in 1881 he bought out his partner's interest and conducted the business until a few weeks before his death. Deceased is survived by his wife.

The poor quality of wheat this year in the north-west and the large percentage of screenings will make the buying of wheat unusually difficult. Screenings dealers are preparing to do a big business. With the abnormal quantity of low grade wheat it will take much more to make a barrel of flour than usual, which in effect will cut down the total crop to a large extent. It is claimed there is a lot of wheat that will run 20 per cent less in weight than normal, which is equivalent to cutting down the crop to the same extent.—Record-Herald.

For Sale

[Copy for notices under this head should reach us by the 12th of the month to insure insertion in the issue for that month.]

ELEVATORS AND MILLS

FOR SALE—IOWA ELEVATOR.

Iowa elevator for sale. For information write JAMES McDONNELL, Trustee, Adair, Iowa.

ELEVATOR IN CORN BELT FOR SALE.

Elevator in corn belt for sale. Easy terms. Address

COON BROS., Rantoul, Ill.

TWO ELEVATORS FOR SALE.

Two grain elevators for sale; include coal house, corn crib, office and residence. Address

M. E. CARDWELL, Rockwell, Iowa.

FOR SALE.

Elevators in Illinois and Indiana that handle from 150,000 bushels to 300,000 bushels annually. Good locations. Prices very reasonable. Address,

JAMES M. MAGUIRE, Campus, Ill.

TERMINAL ELEVATOR FOR SALE.

Part interest or all of 50,000-bushel grain elevator for sale; also 100-car hay warehouse, with established profitable grain business at large terminal market. Address

TERMINAL, Box 9, Care American Elevator & Grain Trade, Chicago, Ill.

ELEVATOR NEAR CANADIAN LINE FOR SALE.

Elevator in Bottineau County, N. D., near Canadian boundary, for sale. Reciprocity will make a splendid market. Two hundred and ten acres for sale with elevator; farm buildings are forty rods from the elevator. An ideal opportunity for an industrious investor. Address

NORTH DAKOTA, Box 4, Care American Elevator & Grain Trade, Chicago, Ill.

FINE TERMINAL PLANT FOR SALE.

Grain Elevator property for sale at Harvey, Ill., on Grand Trunk Railroad. Description: 10 fire-proof storage tanks, capacity 250,000 bushels; bleaching tower; boiler house and boiler; office; motors; machinery; electric switches; concrete foundation for working house, etc. Direct and belt connections with all railroads. Address

H. W. ROGERS & BRO., Western Union Bldg., Chicago, Ill.

MINNEAPOLIS TERMINAL ELEVATOR FOR SALE OR RENT.

Terminal elevator plant at Minneapolis, Minn., with a capacity of 1,550,000 bushels, for sale or rent. Working house has 550,000 bushels capacity; storage house 1,000,000 bushels capacity. Brick power house with 2 engines, one of 150 horse power, and one of 200 horse power. There is a large tract of land and 1,200 feet of valuable trackage. We will sell or rent this property on favorable terms. Address

THE GREAT WESTERN GRAIN CO., Chamber of Commerce, Minneapolis, Minn.

MACHINERY

ENGINES FOR SALE.

Gasoline engines for sale; 5, 7, 10, 20, 30 and 45 horsepower.

TEMPLE PUMP CO., 15th Place, Chicago, Ill.

ENGINE FOR SALE.

One 8 horse power Fairbanks-Morse engine for sale. Nearly new. Address

HOLCOMB-DALTON LUMBER CO., Sycamore, Ill.

ENGINES AND BURR MILL FOR SALE.

Have for sale the following:

Second hand 15 horse power gasoline engine, nearly new and in good condition.

Second hand vertical French burr mill.

Second hand 2 horse power gasoline engine, used but little. For information inquire of

S. B. MERRITT, Prattsburgh, N. Y.

REBUILT MACHINERY FOR SALE.

FEED MILLS—6x15 Barnard and Leas, 6x18 Rickerson, 7x14 Great Western, 7x14 Odell, 7x14 Nordyke & Marmon, 9x24 Barnard and Leas, all two pair high. 6x20 Challenge, 7x14 Richmond, 9x18 Noye, 9x18 Smith, 9x24 Alfree, 9x30 Wolf, all three pair high.

ELEVATOR BELTING—1,200 feet 22-inch 6-ply Rubber Belting with 20x6 Buckets Attached @ 50c per ft. Rubber, cotton and canvas belting, buckets, bolts.

ALL SIZES AND MAKES OF

Roller Mills	Corn & Cob Crushers
Attrition Mills	Separators
Reels	Disc Feed Mills
Sifters	Corn Shellers
Buhr Mills	Brush Machines
Dust Collectors	Water Wheels
Purifiers	Pulleys
Scourers	Shafting
Leather, Rubber, Cotton and Canvas Belting and Elevator Supplies.	

Write for "Gump Bargains" No. 2A, giving complete list of all machinery in stock.

B. F. GUMP CO., 431-437 So. Clinton St., Chicago, Ill.

REBUILT MACHINERY FOR SALE.

List of rebuilt machinery standard makes, late designs, carefully overhauled, and shipped to responsible parties on open account.

ATTRITION MILLS.

One 18-in. Engelberg; one 24-in. Foos; one 24-in. Cogswell.

CYCLONE DUST COLLECTORS.

Three No. 5, 6 No. 6, 4 No. 7.

GRINDING MILLS.

One No. 10 Bowser grinder; one 9x18 three pair high Noye; one 9x14 three pair high Wolf; one 7x18 three pair high Bradford.

CORN SHELLERS.

One No. 1 and one No. 2½ Western.

SCALES.

One Howe Wagon Scale; Dormant scales, 100 to 1,000 pounds capacity.

SEPARATORS.

One No. 2½ B. & L. Warehouse; one No. 4 Monitor receiving separator; one No. 0 Richmond receiving separator.

SCOURERS.

Two No. 7 Eureka for elevator work, capacity 4 to 5 hundred bus. per hour.

GASOLINE ENGINE.

One 34 H. P. Miami, Gas or Gasoline Engine.

ORVILLE SIMPSON CO., Successors to The Straub Machinery Co., Station A., Cincinnati, Ohio.

MACHINERY

MOTOR FOR SALE CHEAP.

One 4-cylinder Brennan motor for sale cheap. Not run 30 days—good as new. Cylinders 7-inch bore by 6-inch stroke. Two complete ignition systems, imported Bosch magneto, oil and water pumps, 2 sets spark plugs, Phanistock vibrating coil, 2 fly wheels. Paid \$950 cash for this motor, f. o. b. Syracuse, N. Y.; will sell for \$650 cash, turning over builders' guarantee, or will trade for lathes, milling machines or shapers. Just the motor for tractor, truck or boat. Address

G. W. MORRIS, Racine, Wis.

SCALES

SCALES FOR SALE.

Scales for elevators, mills, or for hay, grain or stock; new or second-hand at lowest prices. Lists free.

CHICAGO SCALE CO., 299 Jackson Boulevard, Chicago, Ill.

Miscellaneous Notices

[Copy for notices under this head should reach us by the 12th of the month to insure insertion in the issue for that month.]

SECOND HAND COTTON GRAIN BAGS.

Second hand cotton grain bags for sale, from 100 to 5,000. For terms, write

FOELL & CO., 123 Market St., St. Louis, Mo.

ELEVATORS BOUGHT AND SOLD.

I have elevators for sale in all the grain belts, also buyers for all kinds of plants. Write me.

R. W. JETER, The Elevator Salesman, Ashton, Ill.

INCREASE YOUR BOILER CAPACITY.

Before you buy boilers ask about our attachment. Increases capacity; often avoids necessity for additions. Address

SWEENEY BOILER CO., 1636 Monadnock Block, Chicago, Ill.

MACHINERY WANTED

WANTED TO BUY.

We are cash buyers of second-hand grain elevator machinery of all kinds; belting, shafting, buckets, hangers, power transmission and conveying machinery of all descriptions.

Send us a list of what you have to offer.

THE CLINTON SUPPLY CO., 117 So. Clinton St., Chicago, Ill.

Grain and Seeds

SEEDS FOR SALE.

Orchard Grass and Kentucky Blue Grass seed for sale. Ask for free booklet, samples and prices. Address

LOUISVILLE SEED CO., Louisville, Ky.

Edward P. McKenna

John A. Rodgers

McKENNA & RODGERS COMMISSION MERCHANTS

Grain and Provisions, Shippers of Corn and Oats

61 Board of Trade, CHICAGO

Consignments given Special Attention

Phone Harrison 7228

Orders in Futures carefully executed

MAHOGANY CORN WANTED.

Can use up to 25,000 bushels of mahogany corn. Send samples and name lowest price. Address C. C. LEWIS, Chamber of Commerce, Buffalo, N. Y.

FLOUR AND MILL FEEDS.

Mixed cars of flour and mill feeds in 100-pound sacks are our specialties. Would like to send you a trial order to convince you of the superiority of our products.

ANSTED & BURK CO., Springfield, Ohio.

Red Wave Seed Wheat

Bearded, 2½ bushels, new stock, \$3.50. Smooth, \$4.00. One-third better than Rudy. Yield last six years 36 bushels; this year 45 bushels. Also 1,000 bushels good apples for sale, and fine apple cider.

HENRY BAKER, Macy, Indiana



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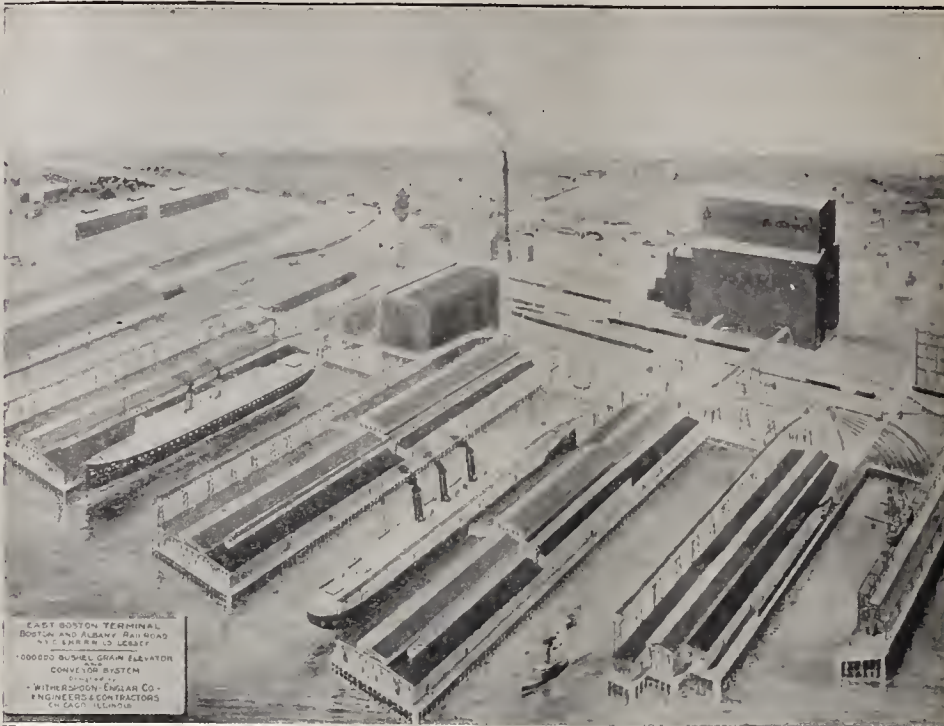


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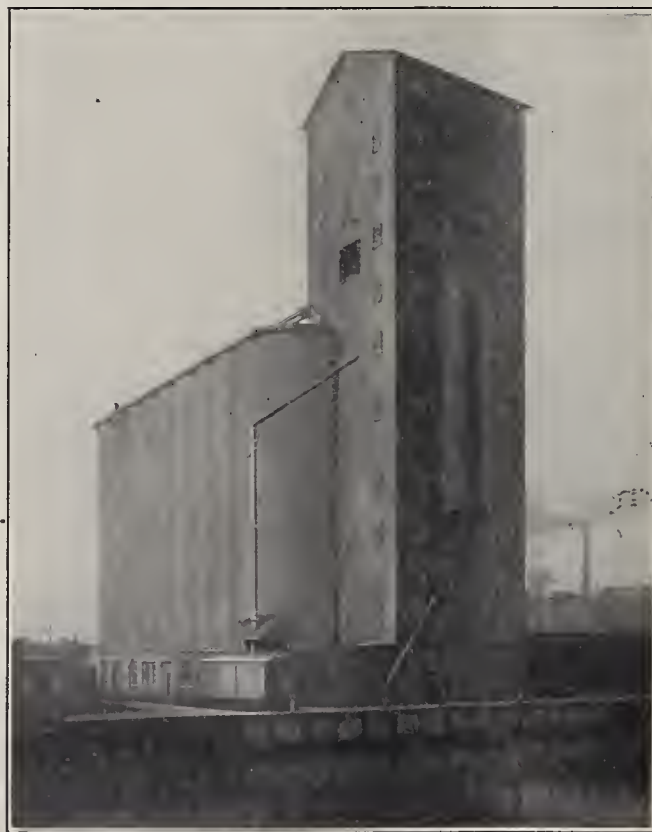
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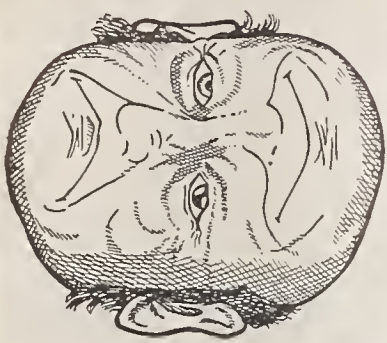
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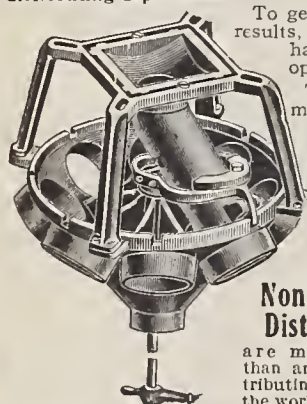
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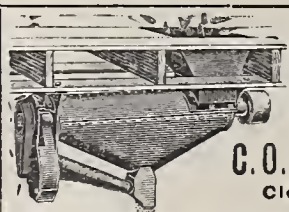
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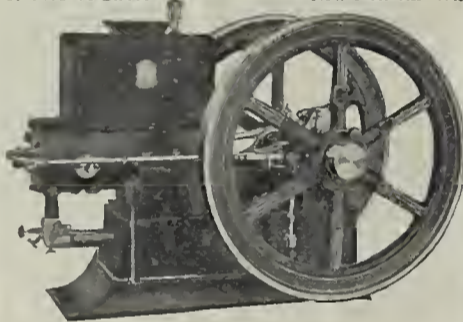
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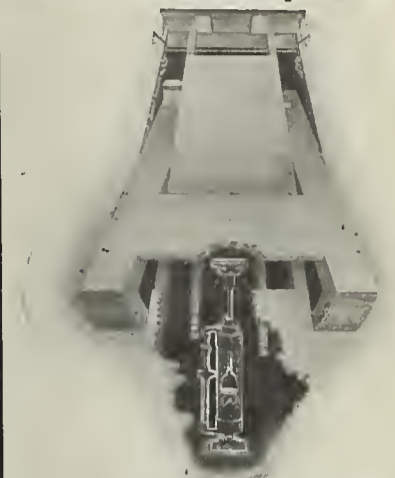
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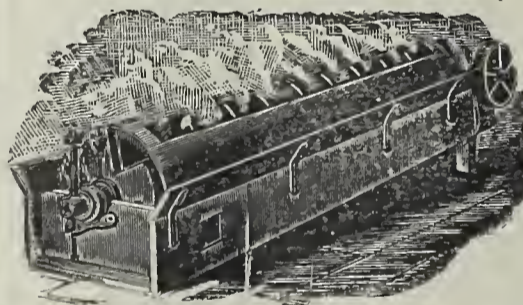
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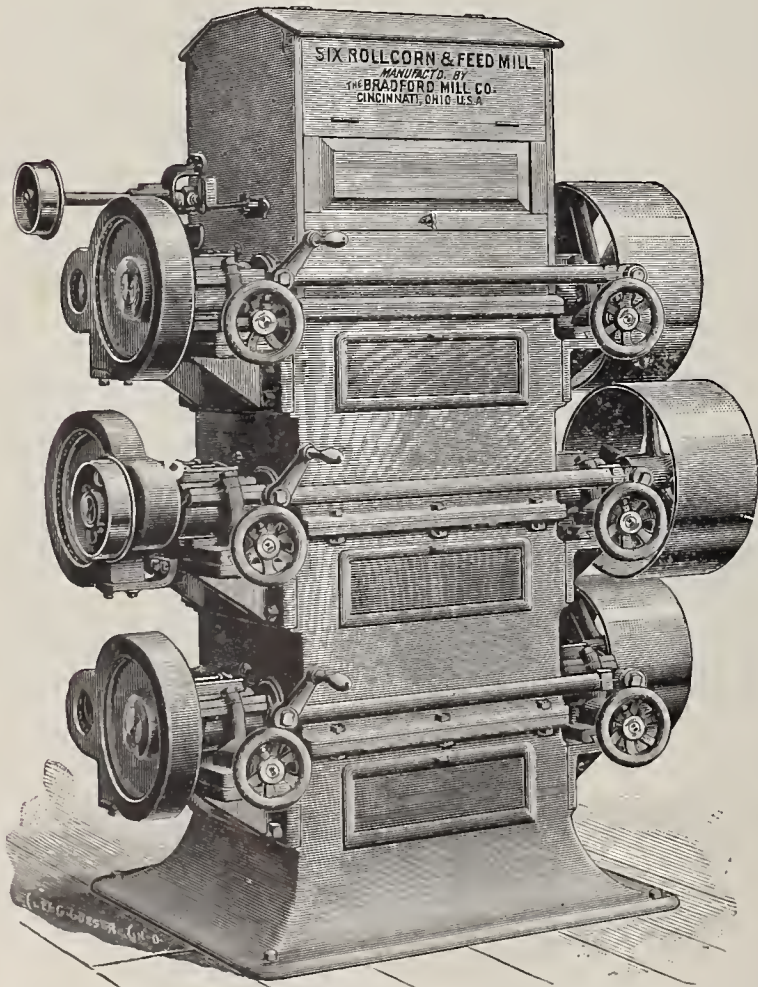
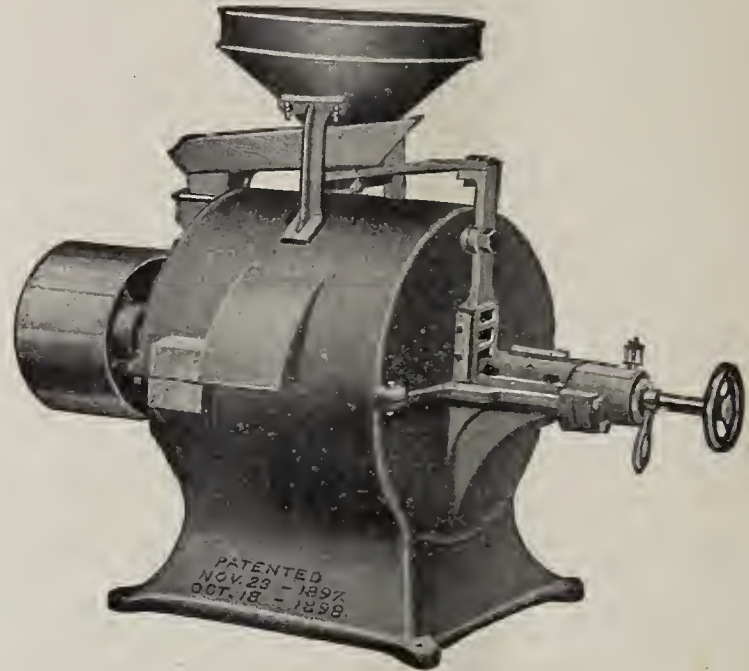
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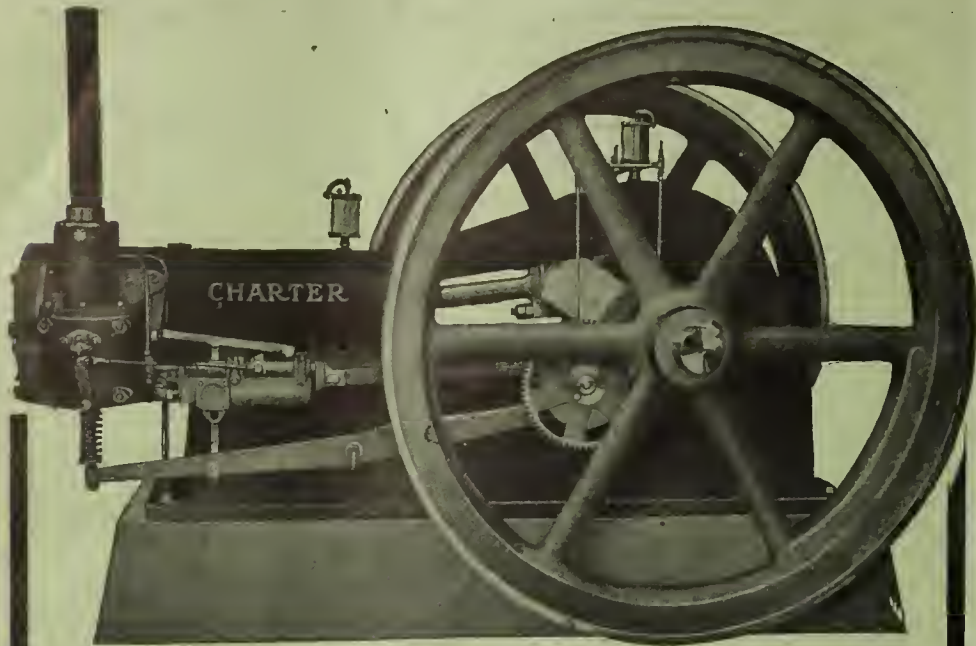
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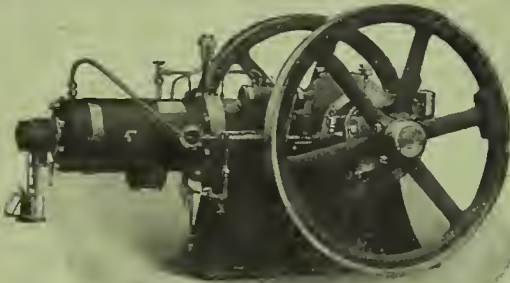
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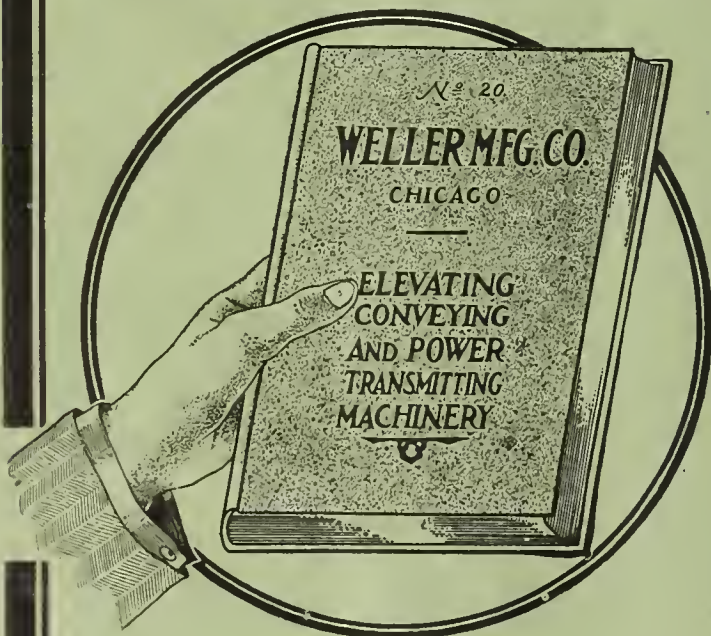
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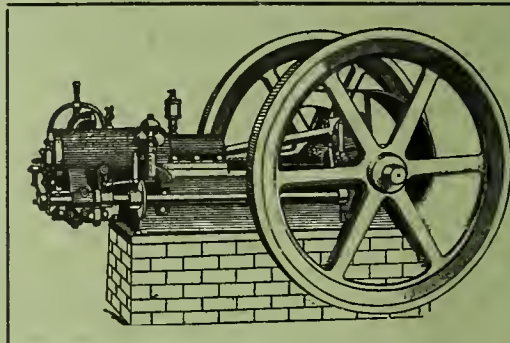


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